

2-1-1959

1959-1960 Catalog

College of the Holy Cross

Follow this and additional works at: http://crossworks.holycross.edu/course_catalog



Part of the [Higher Education Commons](#)

Recommended Citation

College of the Holy Cross, "1959-1960 Catalog" (1959). *Course Catalogs*. 74.
http://crossworks.holycross.edu/course_catalog/74

This Book is brought to you for free and open access by the College Archives at CrossWorks. It has been accepted for inclusion in Course Catalogs by an authorized administrator of CrossWorks.

COLLEGE OF THE HOLY CROSS

A College of Arts and Sciences

Worcester, Massachusetts



CATALOGUE

With Announcements for 1959-1960

Published, February 1959

Contents

Academic Calendar	4
Board of Trustees	6
Officers of Administration	6
Faculty Committees	7
Officers of Instruction	8
Incorporation	18
The College	23
History	23
Campus and Buildings	23
Educational System	27
Affiliations	31
General Services	32
Student Health	32
Student Employment	32
Placement Bureau	32
Library	33
Guidance	33
R. O. T. C.	33
Entertainment	34
Dormitory Accommodations	34
Language Laboratory	34
College Expenses	35
Scholarships	39
Admission to the College	51
General—Freshmen	51
Quantitative Admission Requirements	53
Admission to Advanced Standing	56
Veterans	56

Academic Information	58
The College Year	58
Class Hours	58
Attendance at Exercises	58
Grading System	59
Summer Session Work	61
Extra Courses	61
Voluntary Withdrawal from College	61
Transcripts of College Record	61
Foreign Study	61
Grades and Quality Point	63
Honor Grades	63
Requirements for Good Standing	64
Academic Probation	65
Quantitative Requirements	65
Disqualification	65
Requirements for Degrees	67
Curriculum Requirements	70
Course Numbering (changes)	78
Courses of Instruction	86
Graduate Course in Chemistry	131
Degrees Conferred 1958	134
Awards	143
College Organizations	149
Honor Societies	154
College Publications	155
Jesuit Educational Association	156
Appendix, Library Donors	157

Board of Trustees

Very Rev. William A. Donaghy, S.J., President
 Rev. John M. Maher, S.J., Vice-President
 Rev. Bernard V. Shea, S.J., Treasurer
 Rev. John J. Long, S.J., Secretary
 Rev. William L. Lucey, S.J.
 Rev. Thomas J. Smith, S.J.

Officers of Administration

Very Rev. William A. Donaghy, S.J. <i>President</i>	Fenwick Hall
Rev. John J. Long, S.J. <i>Dean</i>	Fenwick Hall
Rev. Eugene D. McCarthy, S.J. <i>Dean of Men</i>	Kimball Hall
Rev. Joseph E. Mullen, S.J. <i>Dean of Sophomores and Freshmen</i>	Fenwick Hall
Rev. Miles L. Fay, S.J. <i>Assistant Dean—Director of Admissions</i>	Fenwick Hall
Rev. John M. Maher, S.J. <i>Administrator</i>	Fenwick Hall
Rev. Bernard V. Shea, S.J. <i>Treasurer</i>	Fenwick Hall
Rev. William L. Lucey, S.J. <i>Librarian</i>	Dinand Library
Rev. Andrew H. McFadden, S.J. <i>Executive Assistant to the President</i>	Fenwick Hall
Rev. William T. Abbott, S.J. <i>Assistant Dean of Men</i>	Kimball Hall
Rev. David R. Dunigan, S.J. <i>Director, Office of Student Personnel</i>	Fenwick Hall
Rev. J. Leo Sullivan, S.J. <i>Business Manager</i>	Fenwick Hall
Bernard J. McManus <i>Acting Registrar</i>	Fenwick Hall
Francis L. Miller <i>Bursar</i>	Fenwick Hall

Other Executive Officers

Joseph A. Perrotta, B.A., LL.B. <i>Alumni Executive Secretary, Personal Secretary to the President</i>	Fenwick Hall
Frank Gallagher, B.A. <i>Director of Public Relations</i> <i>Director of Alumni Placement Bureau</i>	Fenwick Hall
Eugene F. Flynn, B.A. <i>Director of Athletics</i>	Intramural Gymnasium
John T. Quirk <i>Manager of Kimball Dining Hall</i>	Kimball Hall
William M. Gallagher, B.A. <i>Manager of Bookstore</i>	Kimball Hall
Matthew P. Cavanaugh, B.A. <i>Director of Alumni Fund</i>	Intramural Gymnasium

Faculty Committees

Re-evaluation Committee

Rev. Paul W. Facey, S.J., William J. Grattan, Ph.D., Rev. Eugene J. Harrington, S.J., Rev. Robert B. MacDonnell, S.J., Vincent O. McBrien, Ph.D., Thomas J. McDermott, Ph.D., Rev. Andrew H. McFadden, S.J. (Chairman), Rev. Joseph E. McGrady, S.J., Andrew P. VanHook, Ph.D.

Academic Standing

Very Rev. William A. Donaghy, S.J., President (Chairman), Rev. John J. Long, S.J., Dean, Rev. John M. Maher, S.J., Rev. Andrew H. McFadden, S.J., Rev. Joseph E. Mullen, S.J.

Admissions

Very Rev. William A. Donaghy, S.J., President (Chairman), Rev. Miles L. Fay, S.J., Dean of Admissions, Rev. John J. Long, S.J., Dean, Bernard J. McManus, Acting Registrar.

Curriculum

Rev. Thomas J. Grace, S.J., Rev. Maurice F. Reidy, S.J., Reginald J. Smith, Ed.M. (Chairman).

Discipline

Rev. William T. Abbott, S.J., Rev. Miles L. Fay, S.J., Rev. John J. Long, S.J. (Chairman), Rev. Eugene D. McCarthy, S.J., Rev. Joseph E. Mullen, S.J.

Honors Program

Edward F. Callahan, Ph. D., Rev. John P. Donnelly, S.J., Rev. Paul W. Facey, S.J. Rev. John W. Flavin, S.J., Rev. Thomas J. Grace, S.J., William J. Grattan, Ph.D., William E. Hartnett, Ph.D., Rev. John J. Long, S. J., (Chairman).

Prizes and Fellowships

Rev. David R. Dunigan, S.J., Rev. Thomas J. Grace, S.J., Rev. John J. Long, S.J., (Chairman), Rev. Maurice F. Reidy, S.J., Patrick Shanahan, Ph.D.

Student Activities

Rev. John P. Donnelly, S.J., Rev. James J. Drohan, S.J., (Chairman), Joseph M. Fallon, S.J., Rev. Gerald A. Kinsella, S.J.

Faculty Advisers to Freshmen

Rev. Thomas J. Cahill, S.J., Rev. Francis O. Corcoran, S.J., Rev. Alfred R. Desautels, S.J., Rev. Miles L. Fay, S.J., Rev. John W. Flavin, S.J., Rev. George A. Higgins, S.J. Rev. Joseph LaBran, S.J., Rev. Francis J. MacDonald, S.J., Rev. Arthur J. Madden, S.J., Mr. Thomas F. Mathews, S.J., Rev. Paul G. McGrady, S.J., Rev. Leo A. O'Connor, S.J., Rev Maurice F. Reidy, S.J., Mr. Hugh M. Riley, S.J., Rev. J. Joseph Ryan, S.J., Rev. Laurence R. Skelly, S.J.

Pre-Medical and Pre-Dental Committee

Rev. Joseph F. Busam, S.J., (Chairman), George J. Charest, M.S., Rev. James J. Drohan, S.J., Rev. Robert B. MacDonnell, S.J., Thomas L. Malumphy, Ph.D.

Officers of Instruction

1958 - 1959

Very Rev. William A. Donaghy, S.J.

President

Fenwick Hall

Rev. William T. Abbott, S.J.

Assistant Dean of Men

Fenwick Hall

Rev. Joseph D. Ahearn, S.J.

Professor of Latin

Beaven Hall

Charles A. Baker, M.A.

Instructor of French

30 Terrace Drive

Olier L. Baril, Ph.D. <i>Professor of Chemistry</i> <i>Director of Chemical Research</i>	9 Eureka Street
Rev. George F. Barry, S.J. <i>Instructor in Latin and Theology</i>	Fenwick Hall
Rev. Henry E. Bean, S.J. <i>Professor of Latin and English</i>	Beaven Hall
Francis H. Bernet, Lt. Col., USAF. <i>Professor of Air Science</i> <i>Commanding Officer of AFROTC Unit</i>	1 Ivanhoe Road
Alfred V. Boursy, M.A. <i>Professor of German</i>	16 Janet Circle, Shrewsbury
William F. Bowen, M.A. <i>Professor of French</i>	5 St. Elmo Road
Eugene E. Bracken, Cmdr., USNR. <i>Associate Professor of Naval Science</i> <i>Executive Officer of NROTC Unit</i>	130 Longmeadow Avenue
Rev. Charles E. Buckley, S.J. <i>Associate Professor of Classics</i>	Lehy Hall
Rev. Richard P. Burke, S.J. <i>Associate Professor of Sociology</i>	Fenwick Hall
Rev. Joseph F. Busam, S.J. <i>Professor of Biology</i> <i>Chairman of the Department of Biology</i>	Beaven Hall
Rev. Raymond F. X. Cahill, S.J. <i>Professor of Economics</i>	Carlin Hall
Rev. Thomas J. Cahill, S.J. <i>Associate Professor of Economics</i>	Lehy Hall
Eugene F. Callaghan, Maj. USAF <i>Assistant Professor in Air Science</i>	28 Jeppson Av.
Rev. Hubert C. Callaghan, S.J. <i>Associate Professor of Economics</i> <i>Director of the Institute of Industrial Relations</i>	Fenwick Hall
Edward F. Callahan, Ph.D. <i>Assistant Professor of English</i>	14 West Street, Westboro
Rev. Francis F. Callahan, S.J. <i>Assistant Professor of Philosophy</i>	Fenwick Hall

William A. Campbell, M.S. <i>Associate Professor of Biology</i>	73 Willow Hill, Cherry Valley
Rev. William J. Casey, S.J. <i>Professor of Theology</i>	O'Kane Hall
George J. Charest, M.S. <i>Professor of Chemistry</i>	138 Richmond Avenue
Rev. James K. Connolly, S.J. <i>Professor of Physics</i>	Fenwick Hall
Rev. Joseph B. Connors, S.J. <i>Professor of English</i>	Wheeler Hall
Rev. Francis O. Corcoran, S.J. <i>Professor of History</i>	Wheeler Hall
Robert S. Crowe, M.S. <i>Associate Professor of Biology</i>	1 Claremont Street
Rev. John D. Crowley, S.J. <i>Assistant Professor of Philosophy</i>	Wheeler Hall
William C. Crowley, M.A. <i>Instructor in Economics</i>	273 Bryn Mawr Avenue, Auburn
Rev. Patrick J. Cummings, S.J. <i>Professor of English</i>	Fenwick Hall
Rev. Francis X. Curley, S.J. <i>Instructor in English</i>	Fenwick Hall
Rev. John F. Dailey, S.J. <i>Assistant Professor of English</i>	Fenwick Hall
Mr. Alfonso de Egana, S.J. <i>Instructor in Spanish</i>	Fenwick Hall
Rev. Cyril R. Delaney, S.J. <i>Associate Professor of Theology</i> <i>Chairman of the Department of Theology</i>	Hanselman Hall
Rev. Alfred R. Desautels, S.J. <i>Assistant Professor of French</i> <i>Chairman of the Department of Modern Foreign Languages</i> <i>Advisor to Foreign Students</i>	Fenwick Hall
Rev. John P. Donnelly, S.J. <i>Assistant Professor of Philosophy and Theology</i> <i>Chairman of the Department of Philosophy</i>	Hanselman Hall
Rev. Michael J. Doody, S.J. <i>Professor of Theology</i>	Beaven Hall

Rev. Richard J. Dowling, S.J. <i>Professor of Psychology</i>	Fenwick Hall
Rev. James J. Drohan, S.J. <i>Associate Professor of Philosophy</i>	Alumni Hall
Francis A. Drumm, B.A. <i>Professor of English</i>	184 Park Ave.
Rev. David R. Dunigan, S.J. <i>Director, Student Personnel</i>	Fenwick Hall
Paul J. Edmunds, M.A. <i>Assistant Professor of English</i>	12 Spring Brook Road, Auburn
Rev. Paul W. Facey, S.J. <i>Professor of Sociology</i> <i>Chairman of the Department of Sociology</i>	Carlin Hall
Rev. Joseph M. Fallon, S.J. <i>Instructor in Sociology</i>	Alumni Hall
Joseph J. Fasy, Major, USAF <i>Associate Professor in Air Science</i>	26 Shattuck St.
Rev. Miles L. Fay, S.J. <i>Assistant Dean of Studies</i> <i>Dean of Admissions</i>	Fenwick Hall
Paul E. Fenlon, Ph.D. <i>Associate Professor of Economics</i>	16 East Ave., Shrewbury
Rev. Bernard A. Fiekers, S.J. <i>Professor of Chemistry</i> <i>Chairman of the Department of Chemistry</i>	Fenwick Hall
Rev. Bernard J. Finnegan, S.J. <i>Spiritual Counselor</i>	Fenwick Hall
Rev. Leo E. FitzGerald, S.J. <i>Professor of French</i>	Fenwick Hall
Rev. John W. Flavin, S.J. <i>Assistant Professor of Biology</i>	Wheeler Hall
James T. Flynn, M.A. <i>Instructor in Russian</i>	3 Wyman St.
S. Edward Flynn, Ph.D. <i>Professor of French</i>	58 Chatham Street
Rev. T. Lawrence Foran, S.J. <i>Professor of Classics</i>	Fenwick Hall

Rev. Frederick A. Gallagher, S.J. <i>Professor of English</i>	Fenwick Hall
Rev. Florance M. Gillis, S.J. <i>Professor of Ethics</i>	Fenwick Hall
Edward J. Glass, M.A. <i>Instructor in Sociology</i>	24 Steven Road, Auburn
Rev. Joseph A. Glavin, S.J. <i>Assistant Professor of History</i>	Hanselman Hall
Rev. Thomas J. Grace, S.J. <i>Assistant Professor of English</i> <i>Chairman of the Department of English</i>	Wheeler Hall
William J. Grattan, Ph.D. <i>Professor of History</i>	45 Saxon Road
Rev. John P. Haran, S.J. <i>Professor of Ethics</i>	Fenwick Hall
Rev. Frederick A. Harkins, S.J. <i>Professor of Theology</i>	Fenwick Hall
Rev. Eugene J. Harrington, S.J. <i>Associate Professor of Philosophy</i>	Lehy Hall
Rev. Francis J. Hart, S.J. <i>Student Counsellor</i>	Fenwick Hall
William E. Hartnett, Ph.D. <i>Assistant Professor of Mathematics</i>	137 Whipple Street
Edward F. Havel, Lieut., USN <i>Instructor in Naval Science</i>	16 Institute Road
Rev. George A. Higgins, S.J. <i>Professor of Political Science</i> <i>Chairman of the Department of History and Political Science</i>	Wheeler Hall
Peter Horwath, M.A. <i>Instructor in German</i>	4 Minthorne Street
Rev. Francis A. Hugal, S.J. <i>Associate Professor of Theology</i>	Fenwick Hall
Rev. John H. Hutchinson, S.J. <i>Professor of Ethics</i>	Fenwick Hall
Rev. Paul F. Izzo, S.J. <i>Professor of Latin</i> <i>Chairman of the Department of Classics</i>	Alumni Hall

Rev. Edward J. Keating, S.J. <i>Professor of Philosophy</i>	Fenwick Hall
Rev. William L. Keleher, S.J. <i>Associate Professor of Philosophy</i>	Lehy Hall
James P. Kelly, Maj., USMC <i>Instructor in Naval Science</i>	140 May Street
Rev. John H. Kelly, S.J. <i>Associate Professor of Greek</i>	Hanselman Hall
Donald A. King, B.S. <i>Instructor in Economics</i>	33 Richmond Avenue
Rev. George A. King, S.J. <i>Professor of Political Science</i>	Carlin Hall
Rev. John A. King, S.J. <i>Assistant Professor of Theology</i>	O'Kane Hall
Rev. Gerald A. Kinsella, S.J. <i>Assistant Professor of History</i>	Lehy Hall
Thomas R. Knapp, M.A. <i>Instructor in Education</i>	16 Lowell Street
Rev. Joseph Labran <i>Moderator of Sodality</i>	Fenwick Hall
William F. Lahey, M.A. <i>Associate Professor of English</i>	36 Saxon Road
Rev. James M. Leavey, S.J. <i>Professor of French</i>	Fenwick Hall
Rev. John J. Long, S.J. <i>Dean</i>	Fenwick Hall
Rev. William L. Lucey, S.J. <i>Professor of History</i>	Fenwick Hall
Rev. Anthony J. MacCormack, S.J. <i>Professor of Biology</i>	Hanselman Hall
Rev. Francis J. MacDonald, S.J. <i>Associate Professor of Philosophy</i>	O'Kane Hall
Rev. Robert B. MacDonnell, S.J. <i>Associate Professor of Physics</i>	Wheeler Hall
Rev. Arthur J. Madden, S.J. <i>Assistant Professor of English</i>	Wheeler Hall
Thomas L. Malumphy, Ph.D. <i>Professor of Biology</i>	939 Main Street

Rev. Joseph M. Marique, S.J. <i>Professor of Greek</i>	Fenwick Hall
Rev. Joseph A. Martus, S.J. <i>Associate Professor of Chemistry</i>	Beaven Hall
Mr. Thomas F. Mathews, S.J. <i>Instructor in Classics</i>	Fenwick Hall
Vincent O. McBrien, Ph.D. <i>Professor of Mathematics</i>	14 Saratoga Road, Auburn
William H. McCann, M.A. <i>Professor of English</i>	58 Maywood Street
Bernard W. McCarthy, M.A. <i>Professor of Accounting</i>	82 Green Hill Parkway
Rev. Eugene D. McCarthy, S.J. <i>Dean of Men</i> <i>Director of Student Health</i>	Kimball Hall
John R. McCarthy, M.A. <i>Assistant Professor of Mathematics</i>	28 Boyden Street
Rev. Leonard J. McCarthy, S.J. <i>Instructor in English</i>	Fenwick Hall
Thomas J. McDermott, Ph.D. <i>Associate Professor of Economics</i>	12 Steven Road, Westboro
Raymond E. McDonald, M.S. <i>Professor of Physics</i>	39 Marion Street, Natick
Rev. Andrew H. McFadden, S.J. <i>Executive Assistant to the President</i>	Fenwick Hall
Rev. Joseph E. McGrady, S.J. <i>Associate Professor of Greek and Theology</i>	Alumni Hall
Rev. Paul G. McGrady, S.J. <i>Instructor in Classics</i>	Fenwick Hall
Rev. Owen P. McKenna, S.J. <i>Associate Professor of History</i>	Alumni Hall
Robert F. McNerney, Jr., Ph.D. <i>Associate Professor of Spanish</i>	193 Whitmarsh Avenue
Rev. J. Gerard Mears, S.J. <i>Professor of Fine Arts</i>	Fenwick Hall
Frederick S. Mirliani, M.A. <i>Associate Professor of Music</i>	13 Winter Street, Auburn
Rev. David J. Moran, S.J. <i>Professor of Ethics</i>	Beaven Hall

Rev. Joseph E. Mullen, S.J. <i>Dean of Freshmen and Sophomores</i>	Carlin Hall
James H. Nestor, M.A. <i>Professor of Mathematics</i>	941 Main Street
John V. Noble, B.A. <i>Associate Professor of French and German</i>	74 Franklin Street
John D. O'Connell, M.A. <i>Assistant Professor in Accounting</i>	16 Geneva Street
Rev. Leo A. O'Connor, S.J. <i>Professor of Theology</i>	O'Kane Hall
John J. O'Neil, Capt., USAF <i>Instructor in Air Science</i>	11 Pinecrest Drive
Edward Peragallo, Ph.D., C.P.A. <i>Professor of Accounting and Economics</i> <i>Chairman of the Department of Accounting and Economics</i>	58 Elm Street
Walter J. Powers, B.A. <i>Instructor in Economics</i>	33 Richmond Avenue
Keith F. Prater, Lt. (j.g.), USN <i>Instructor in Naval Science</i>	113 Worthington Street, Auburn
William F. Radle, Ph.D. <i>Associate Professor of Physics</i>	40 Hollywood Street
John P. Reardon, Ed.M. <i>Instructor in Fine Arts</i>	8 Melville Street
Rev. Maurice F. Reidy, S.J. <i>Associate Professor of History</i>	Wheeler Hall
William T. Reilly, Lt. Cmdr., USN <i>Instructor in Naval Science</i>	17 Glen Terrace, Shrewsbury
Hugh M. Riley, S.J. <i>Instructor in German</i>	Fenwick Hall
Rev. J. Joseph Ryan, S.J. <i>Assistant Professor of Education</i> <i>Chairman of the Department of Education</i> <i>Director of Teacher Training</i>	Campion Hall
Hugo F. Saluti, M.A. <i>Instructor in Economics</i>	33 Richmond Avenue
Rev. John J. Sampey, S.J. <i>Professor of Latin</i>	Carlin Hall

- Rev. Francis B. Sarjeant, S.J.
Professor of Ethics Lehy Hall
- Rev. Joseph S. Scannell, S.J.
Assistant Professor of English and Fine Arts Hanselman Hall
- Robert N. Scola, B.S. LL.B.
Assistant Professor in Business Law 69 Amherst Street
- Patrick Shanahan, Ph.D.
Assistant Professor in Mathematics 184 College Street
- Rev. Thomas A. Shanahan, S.J.
Professor of English Carlin Hall
- Rev. Joseph J. Shea, S.J.
Professor of Philosophy Hanselman Hall
- Angelo G. Silvestrini, Ph.D.
Assistant Professor of French 649 Chandler Street
- Rev. Laurence R. Skelly, S.J.
Instructor in English and Fine Arts Campion Hall
- Reginald J. Smith, Ed.M.
Associate Professor of Accounting 639 Pleasant Street, Paxton
- Rev. Thomas J. Smith, S.J.
Professor of Physics
Chairman of the Department of Physics Alumni Hall
- Francis J. Steckbeck, Lieut., USN
Instructor in Naval Science Barnes Road, W. Berlin
- Rev. John R. Sullivan, S.J.
Associate Professor of Education and Theology Hanselman Hall
- Rev. Russell M. Sullivan, S.J.
Professor of Theology Fenwick Hall
- Rev. Raymond J. Swords, S.J.
Associate Professor of Mathematics
Chairman of the Department of Mathematics Lehy Hall
- James J. Tansey, M.A.
Associate Professor of Chemistry Box 98, Main St., Charlton
- Andrew P. VanHook, Ph.D.
Professor of Chemistry Henshaw Street, Leicester
- Rev. Thomas J. Walsh, S.J.
Associate Professor of Theology Fenwick Hall

Paul A. Whelan, Capt., USAF
Instructor in Air Science

106 Beverly Road

Prentis K. Will, Capt., USN
Professor of Naval Science
Commanding Officer of NROTC Unit

97 Highland Street, Holden

One Hundred and Sixteenth Year

College of the Holy Cross

Worcester 10, Mass.

Conducted by the Fathers of the Society of Jesus

Founded in 1843

Act of Incorporation

An act of the Legislature of Massachusetts, date March 24, 1865, reads as follows:

COMMONWEALTH OF MASSACHUSETTS

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND SIXTY-FIVE

AN ACT

to incorporate the Trustees of the College of the Holy Cross

*Be it enacted by the Senate and House of Representatives in General Court assembled
and by the authority of the same, as follows:*

SECTION 1. James Clarke, Charles Fulmer, James C. Moore, Charles F. Kelly, Livy Vigilante, their associates and successors, are hereby constituted a body corporate by the name of the Trustees of the College of the Holy Cross, in the city of Worcester, and they and their successors and such as shall be duly elected members of such corporation, shall be and remain a body corporate by that name forever; and for the orderly conducting of the business of said corporation, the said trustees shall have power and authority, from time to time, as occasion may require, to elect a President, Vice-President, Secretary, Treasurer, and such other officers of said corporation as may be found necessary, and to declare the duties and tenures of their respective offices, and also to remove any trustee from the corporation when in their judgement he shall be rendered incapable, by age or otherwise, of discharging the duties of his office, or shall neglect or refuse to perform the same, and also from time to time to elect new members of said corporation;

provided that the number of members shall never be less than five nor more than eleven.

SECTION 2. The said corporation shall have full power and authority to determine at what times and places their meetings shall be holden, and the manner of notifying the trustees to convene such meetings, and also from time to time to elect a President of said College, and such professors, tutors, instructors and other officers of the said College, as they shall judge most for the interest thereof, and to determine the duties, salaries, emoluments, responsibilities and tenures of their several offices; and the said corporation is further empowered to purchase or erect and keep in repair such houses and other buildings as it shall judge necessary for said College, and to confer such degrees as are conferred by any college in this Commonwealth, except medical degrees; provided nevertheless, that no corporate business shall be transacted at any meeting unless a majority of the trustees are present.

SECTION 3. Said corporation may have a common seal which it may alter or renew at pleasure, and all deeds sealed with the seal of said corporation and signed by its order, shall, when made in the corporate name, be considered in law as the deeds of said corporation, and said corporation may sue and be sued in all actions, real, personal, or mixed, and may prosecute the same to final judgment and execution, by the name of the Trustees of the College of the Holy Cross; and said corporation shall be capable of taking and holding, in fee simple or any less estate, by gift, grant, bequest, devise or otherwise, any lands, tenements, or other estate real or personal, to an amount not exceeding three hundred thousand dollars.

SECTION 4. The clear rents and profits of all the estate, real and personal, of which the said corporation shall be seized and possessed, shall be appropriated to the endowment of said College, in such manner as shall best promote virtue, piety, and learning in such of the languages and of the liberal and useful arts and sciences as shall be recommended from time to time by the said corporation, conforming, however, to the will of any donor or donors in the application of any estate which may be given, devised, or bequeathed, for any particular object connected with the College; and no misnomer of the said corporation shall defeat or annul any donation, gift, grant, devise or bequest, to or from the said corporation.

SECTION 5. The Legislature of this Commonwealth may alter, limit, restrain, or annul, any of the powers, vested by this act in the said corporation, as shall be deemed necessary, and more especially may appoint overseers, or visitors of the said College, with all necessary powers for the better aid, preservation and government thereof.

SECTION 6. The granting of this Charter shall never be considered as any pledge on the part of the Commonwealth that pecuniary aid shall hereafter be granted to the College.

House of Representatives, March 21, 1865.
Passed to be enacted, Alex. H. Bullock, Speaker.

In Senate, March 23, 1865.
Passed to be enacted, I. E. Field, President.

March 24, 1865.

Approved.

John A. Andrew,
Governor

ACT OF INCORPORATION

(Chapter 149.)

THE COMMONWEALTH OF MASSACHUSETTS

IN THE YEAR ONE THOUSAND NINE HUNDRED AND TWENTY-SEVEN

AN ACT

Authorizing the Trustees of the College of the Holy Cross to hold
Additional Real and Personal Estate.

*Be it enacted by the Senate and House of Representatives in General Court assembled
and by the authority of the same, as follows:*

Section three of chapter ninety-nine of the acts of eighteen hundred and sixty-five is hereby amended by striking out, in the twelfth and thirteenth lines, the words, "to an amount not exceeding three hundred thousand dollars,"—so as to read as follows:—

SECTION 3. Said corporation may have a common seal, which it may alter or renew at pleasure, and all deeds sealed with the seal of said corporation, and signed by its order, shall, when made in the corporate name, be considered in law as the deeds of said corporation; and said corporation may sue and be sued in all actions, real, personal or mixed, and may prosecute the same to final judgement and execution by the name of the Trustees of the College of the Holy Cross; and said corporation shall be capable of taking and holding in fee simple or any less estate, by gift, grant, bequest, devise, or otherwise, any lands, tenements, or other estate, real or personal.

House of Representatives, March 16, 1927

Passed to be enacted, John C. Hull, Speaker.

In Senate, March 17, 1927

Passed to be enacted, Wellington Wells, President.

March 23, 1927

Approved.

ALVAN T. FULLER,
Governor.

THE COMMONWEALTH OF MASSACHUSETTS

Office of the Secretary

Boston, March, 25, 1927.

A True Copy

Witness the Great Seal of the Commonwealth.

(Signed) F. W. Cook,
Secretary of the Commonwealth.

The College

History

The College of the Holy Cross was founded in the year 1843 by the Most Rev. Benedict Joseph Fenwick, second Bishop of Boston, and is the oldest Catholic College in New England. It had long been a cherished desire of Bishop Fenwick to establish in his diocese, which then included the City of Worcester, an institution for the higher education of Catholic young men. In bringing about the realization of this desire he was aided by the Rev. James Fitton, who had, as early as 1838, established the Seminary of Mt. St. James on the hill which now bears that name, but was then known as Pakachoag, "Hill of Pleasant Springs." This institution Father Fitton presented to the Bishop in 1843, and on this site the distinguished prelate determined to build his college. He gave it the name of his Cathedral, with the motto and emblem of the Boston Diocese — a cross in the heavens, as it appeared to the Emperor Constantine, with its historic legend.

In order to secure for New England students the benefits of that unique plan of collegiate instruction, the *Ratio Studiorum*, which had been for over two centuries the invigorating pattern of continental education, Bishop Fenwick invited the founders of that system, the Fathers of the Society of Jesus, whose missionary and educational activities on the North American continent began as early as 1610, to organize the courses of study according to the curricula of their college at Georgetown in the District of Columbia, and to take entire charge of the teaching. On the second day of November, 1843, the first classes were organized, and were held in the seminary structure until the completion of the first college building in January, 1844.

The generous patronage and zealous interest of Bishop Fenwick continued unflinchingly, and a few days before his death on the 6th of August, 1846, he ceded to the Jesuit Fathers full possession of the institution, land and buildings unencumbered.

A disaster that threatened its existence visited the young college in July, 1852, when the whole of the central building was destroyed by fire. Through the sympathetic cooperation of Most Rev. John B. Fitzpatrick, who had succeeded to Bishop Fenwick's See, only a single scholastic year was lost, for the college, enlarged and remodeled, reopened on the 3rd of October, 1853.

Campus and Buildings

The College of the Holy Cross is situated in Worcester, Massachusetts, the second largest city in the state, with a population of over 200,000.

The campus contains one hundred and sixty-three acres and is conveniently located at the southern end of the city, approximately two miles from the business district, at an elevation of 693 feet above the sea.

Fenwick Hall

Named for the Founder of Holy Cross College, is the oldest of the college buildings. In the spring of 1875 the remnant spared by the fire of 1852 was raised and extended toward the east. The central span houses the offices of the administration on the first floor, faculty living quarters on the second and third, and student dormitories on the fourth. The east frontage is occupied, on the first floor, by the faculty refectory, while the upper part of the building contains the Community Chapel. The infirmary is located in a small wing adjoining this part of the building at its south end.

O'Kane Hall

Named for a former beloved Rector of Holy Cross, stands at the summit of Linden Lane facing the campus. It was built in 1895 and is a lively center of undergraduate activity. On the first floor is a spacious, comfortably furnished foyer and reception hall. Two floors of the south wing and a part of the west are occupied by the Department of Chemistry; on the second floor is the Chemistry reference library. Six laboratories are in constant use by the students. The Fenwick assembly hall is located in the O'Kane building and features a large and well-equipped stage for dramatic productions. On the upper floors of the building are located several corridors of pleasantly situated students' quarters.

Alumni Hall

Erected in 1905 through generosity of former students, is a thoroughly modern, fire-proof building. The upper floors contain nearly one hundred student living rooms, extensively renovated in 1940. The rest of the building is devoted to the purposes of the Physics Department. Here are situated the lecture rooms, apparatus rooms, reference library and laboratories where students of this branch of science are instructed in theory and trained in practice.

Beaven Hall

Gift of the late Most Rev. Thomas D. Beaven, D.D., and the clergy of the Springfield diocese, opened to its occupants in September, 1913. Modern in every detail, the three upper floors, renovated in the summer of 1941, provide comfortable living quarters. Classrooms and office are located on the first floor.

Carlin Hall

In the month of October of the year 1941, the Board of Trustees of the College of the Holy Cross unanimously resolved to change the name of Loyola Hall to Carlin Hall. This change of name is intended to perpetuate the memory of the Very Reverend James J. Carlin, S.J., President of the College of the Holy Cross from 1918 to 1924,

under whose direction the building was erected in 1922. The upper floors provide living rooms. Classrooms, faculty offices and accounting laboratories are located on the lower floors.

Wheeler Hall

Dedicated to the memory of the Rev. John D. Wheeler, S.J., for many years active in the administration of the College, was opened in January, 1940. The upper floors provide living rooms. Five classrooms are located on the lower floor.

Hanselman Hall

One of the two new student dormitory buildings opened in September 1954, is a modern three and one half story building with accommodations for one hundred and eighty-two students and eight faculty members. A spacious student lounge is located on the first floor. The building is named after the Reverend Joseph F. Hanselman, S.J., President from 1901 to 1906.

Lehy Hall

The second of the two student dormitory buildings opened in September 1954, stands on the west side of Hanselman Hall and is similar to it in design and construction. It will accommodate one hundred and seventy-four students and eight faculty members. It is named after the Reverend John F. Lehy, S.J., President from 1895 to 1901.

Campion Hall

A small homelike building opened in 1936, provides living quarters for a limited number of students.

Dinand Library

Situated on the terraced slope between O'Kane and Beaven Halls, exemplifies the best tradition of the architecture of the Italian Renaissance. It was dedicated in November, 1927, and named after the Most Reverend Joseph N. Dinand, S.J., D.D., twice President of the College of the Holy Cross.

St. Joseph Memorial Chapel

The center of the students' spiritual life, rears its colonnaded facade above the scene at the eastern extremity of the campus. Known for its architectural beauty and purity of design, it is a fitting symbol of the ideals that permeate and dominate the culture of Holy Cross.

Beneath St. Joseph's Memorial Chapel is the newly-constructed Mary Chapel with twenty-one altars. Low ceilinged and vaulted, the Mary Chapel has ten alcoves on either side—in each of which there are two Peruvian travertine altars. The main altar, of green Milanese marble, is a five and one-half ton solid piece. This Chapel symbolizes the particular devotion that the Holy Cross student has for Our Lady.

Kimball Hall

A beautiful and commodious refectory building, was opened on January 6, 1935. This building contains a kitchen and refectory accommodating twelve hundred students. It contains also a theatre accommodating seven hundred, a cafeteria, the office of Dean of Men, the bookstore and services.

Biology Building

Opened in 1951, is a modern three story building situated on the west side of Beaven Hall. Devoted exclusively to the teaching of biology, it contains two large lecture rooms, five laboratories, a reference library, museum, offices for the faculty, stock rooms, and other facilities.

The New Science Building

The Physical Science Building, under construction and designed to house the departments of Chemistry, Mathematics and Physics, is on an eminence overlooking Linden Lane at the extreme western end of the Campus. The building will have libraries for each of the sciences, as well as laboratories, lecture rooms, and classrooms for general use.

Fine Arts Building

This building, formerly the intramural gymnasium, has been renovated to provide a Fine Arts Studio, and offices and practice rooms for the Musical Clubs.

The Students' Observatory

At the east end of the campus, provides observational work for classes in Astronomy. It houses a dark room, work room and dome for a five inch refractor.

The Intramural Gymnasium

Contains basketball courts, handball courts and the necessary space and equipment for gymnastic exercises. This building provides adequate accommodations for participation in indoor sports for a large number of students. The offices of the College Athletic Association and Varsity Coaches are also located here.

The Athletic Fields

Contain the football gridiron, the baseball diamond, the quarter-mile track, tennis courts, basketball courts, hockey rink, and facilities for all other outdoor sports. The baseball diamond on Fitton Field is bounded on the east by the football gridiron which is surrounded on four sides by stadia seating nearly 23,000. Freshman Field and Alumni Field are suitable for practice and for the games of the intramural teams. On the plateau that crowns the hill south of the College buildings, as well as on the lower east level, are laid out diamonds and gridirons for intramural contests, in which the majority of undergraduates participate.

Educational System

The system of education is the one common to all the colleges of the Society of Jesus and is guided by the principles outlined in the famous *Ratio Studiorum*. It is a system based on studied experience and centuries of observation. In this system the principle of unity in education is of prime importance. It makes the education of a youth from his entrance into college to the completion of his course a graded, related and systematic unit directed not to the mere accumulation of facts, but to the development of his mental faculties and the training of his character.

This system invests education with all the sanctity and serious responsibility of religion itself. It holds that the attainment thereof can best be had by particular means. These means, as it conceives them, are adapted to all students because all are alike in those particulars with which education in its proper meaning has to do. While admitting that students vary in talents, in powers of application, in mental tendencies and aptitudes, the system fearlessly asserts that all students have intellectual faculties essentially similar, v. g., memory, powers of observation, of reasoning, of judgement, of imagination and of discrimination; and since these powers are of the same essential character in all, they are strengthened and developed by similar exercises and similar training in whomsoever found.

It proceeds on the theory that genuine education calls throughout for the supervision and control of trained, experienced educators and is not to be regulated by the inexperienced student himself. Keeping in view the essential distinction between collegiate and university education, as that of a general as distinguished from a special or professional education, the studies are for the most part prescribed. Its immediate object makes this course imperative. It aims at the preliminary development of the whole man as the essence of education and its only legitimate meaning. After this is had, specialization along particular lines may properly follow.

Assuming that there is a hierarchy in the branches of knowledge, this system insists on the advantages of a prescribed training in the humanities, mathematics, natural or social sciences, logic, psychology, ethics and religion as the best basis for any profession or for further intellectual training in any direction.

This system rests on the theory that men of fully developed faculties who have been previously trained to correct and accurate reasoning, to close observation, to tireless industry, to keen discrimination, to sustained application, to sound and sober judgment, to vivid and lively imagination, ordinarily will outstrip in any line of human endeavor the single-sided man who immediately applies his untried, unprepared and untutored powers to his special life-work.

The College of the Holy Cross, therefore, following a system elaborated by centuries of experience and meeting the demand for modern improvements by wise adaptation and readjustment, undertakes to mould the characters of her students to habits of patient industry, of mental and moral temperance and intelligent interests. By the constant exercise and concordant enlargement of many faculties, by an introduction to many sciences, by grounding in logic, in the general principles of philosophy and in ethics, this training preserves any one faculty in the formative period of life from so abnormally developing as to stunt or atrophy others. It lays before the student in large outline a map of the realm he may afterwards traverse in part and in detail, and it co-ordinates and relates his after-specialty to other learning. It aims at the double end of maturing the faculties and fixing the habits, and at the same time constructing a firm, broad, solid and substantial foundation on which to erect the superstructure of particular callings.

After the completion of such a course as is here given, the graduate is not sent to the medical school without sufficient preparation in chemistry, physics and biology. Nor does he lack a clear knowledge of the moral responsibility of the physician and surgeon. He is not sent to the law school without an intelligent grasp of the ethical nature and development of man and of the logical processes which make for and characterize sound judgment. He is not sent to the profession of teaching without adequate training for success in grasping truth and imparting it to others, without a more intimate knowledge of the responsibility of a teacher than he can acquire from a few vague talks on pedagogy. He is not sent to the theological seminary without any knowledge of the language in which the New Testament was written, or the methods of philosophical reflection and their bearing upon the problems of life and destiny. On the contrary, when the graduate passes from the college, whether he devotes himself chiefly to the highest learning, or seeks at once a training in applied science or in a profession, he will at any rate carry into the university a mind equipped for the work it demands.

Method of Teaching

The College is in its method of teaching primarily tutorial, not professorial. The formation it proposes to give is effected by personal and intimate relations between small groups of pupils and a teacher, whose duty comprehends guidance, advice and encouragement as well as instruction.

In order that this tutorial method may be pursued most effectively, a number of instructors are assigned to each Hall, and in every Student-House teachers reside to whom the students may have recourse for guidance in studies.

Such a method of education gives the student time and opportunity to study. It enables him to compare his capacities and inclinations. It helps him to make a life decision which shall be founded on observation, experience and reason.

Religious Training

The supervision over the student's moral life is as systematic as the direction of his mental life. Education, as understood in this system, is, as has been said, the training of the whole man, in which training the supreme element is growth along the lines of Christian morality. The whole system rests on the principle that men cannot truly advance in knowledge unless they advance more closely to God. The truth expressed in bold letters over the entrance to the College Library emphasizes the ultimate purpose of education as understood in this college. "*Ut Cognoscant Te Solum Deum Verum Et Quem Misisti Jesum Christum.*"

While recognizing in its fullest extent the advantages of a liberal education in the purely secular order, the College at the same time understands that education must contain a power that can form or sustain character. Only when it is occupied with the entire man, particularly with those faculties that are distinctive of man, and with man's entire life, the present and the future, does education attain its ultimate end.

The scope of education is not limited to the commercial advantages it possesses or the qualities it confers on its votaries to move among men with that ease and grace of manner which is the flower of the humanities. Education should rather seek to form a Christian character. Through a training addressed to the student's spiritual nature his character is strengthened against the disturbing forces of his impulses and passions.

Rightly, therefore, does Holy Cross College insist that in every stage of intellectual development religious instruction be interwoven with training in the secular branches of knowledge. This instruction aims at planting in the heart such principles of rectitude as will afterwards serve as a guide, a warning, a stimulus. Since Religion is the highest concern of man, as well as the strongest defense of a nation, Religion is made a prescribed subject. Men, long trained in the world's best wisdom, whose consciences have been formed to the law of God by years of self-discipline are the expounders of the eternal truth.

Annual Retreat

Integral to the college year and a base for academic pursuits is the Annual Retreat, during which are given the Spiritual Exercises of St. Ignatius Loyola. Catholic students are obliged to attend all the exercises of the Retreat.

Student Counsellor

The principal duty of the Student Counsellor is to direct the spiritual activities of the College and the various religious societies and sodalities.

He provides opportunities for the students to receive the Sacraments in addition to times assigned for the general student body.

He is in a special sense the friend and adviser of the students, not only in matters directly spiritual, but also material and temporal, in their studies, their social affairs, and in other intimate and personal matters as each one may wish.

One of the questions of highest importance to every college or high school graduate is the wise choice of a profession or vocation according to one's character, talents and attractions both natural and supernatural. No student with a serious outlook on life will fail to determine, well in advance of his graduation, the career which under God's providence will best assure his temporal success and his eternal happiness. In this matter the assistance of the Student Counsellor will be invaluable. The hours will be arranged to afford ample opportunity to the students for conferring with him.

Discipline

A closer supervision is exercised over the students than is usual at the present day in most of the large colleges. Yet an effort is made to exclude from this supervision every harsh feature. The professors live with the students, mingle with them constantly, direct their studies, interest themselves in their sports and in every way assume the relation rather of friend than of taskmaster. This constant, familiar, personal communion, in kindly terms between professor and student, is a powerful factor in the formation of character.

The age of the student is also considered, and in the later years of his college course a larger degree of liberty is granted him. With regard to all, the enforcement of discipline, while mild and considerate, is unflinchingly firm, especially when there is question of the good of the student body or the reputation of the College.

Students are expected to manifest both within and outside of the College the respect for order, morality, personal honor and the rights of others, that is required of good citizens. Failure to do this will necessitate withdrawal from the College. The administration reserves the right to dismiss a student at any time without any definite charge.

Detailed regulations and customs governing discipline are set forth in the Student Hand-Book.

Affiliations

The better to promote the educational ideals of the Society of Jesus and to share in the fruits of the scholarship of other institutions of learning, the College of the Holy Cross holds institutional membership in the following organizations:

The Catholic Educational Association, The American Council on Education, The Association of American Universities, The Association of American Colleges, The New England Association of Colleges and Secondary Schools, The American Association of Collegiate Registrars and Admissions officers, The Regents of the University of the State of New York, New England Conference on Graduate Education, The American Mathematical Society and The Jesuit Educational Association.

Members of the faculty are associated with: The Classical Association of New England, The Eastern Association of College Deans and Advisers of Men, The American Catholic Historical Association, The American Historical Association, The Jesuit Philosophical Association, The American Association of Jesuit Scientists, The American Association for the Advancement of Science, The American Mathematical Society, The Mathematical Association of America, Institute of Mathematical Statistics, American Statistical Association, Association of Teachers of Mathematics in New England, The American Physical Society, American Association of Physics Teachers, Optical Society of America, Acoustical Society of America, Institute of Radio Engineers, American Astronomical Society, The American Chemical Society, The New England Association of Chemistry Teachers, The American Electrochemical Society, The Chemical Society (London), The Faraday Society, The Franklin Institute (Philadelphia), The American Institute of Chemists, The American Academy of Political and Social Science, The American Political Science Association, The American Society for Public Administration, The American Economic Association, The National Catholic Industrial Conference, The Association of Librarians of America, The American Association of University Professors, Archaeological Institute of America, American Philological Association.

General Services

Student Health Service

All resident students at the College of the Holy Cross are entitled to medical service with the following privileges: (1) Consultation with the College Physician, daily, if necessary. (2) Visits by the College Physician while the student is confined in the the College Infirmary. (3) Board, room and nursing at the College Infirmary. Nursing attendance is rendered by the nurse regularly employed by the College. Special outside nurses, if employed, must be paid for by the student.

No student is obligated to patronize the College Physician. With the permission of the College Director of Health and at the expense of his parents, a student may consult any physician approved by his parents. When medicines are prescribed the expense is to be borne by the student. The College cannot furnish regular special diets to students who may require such treatment. Expenses incurred for hospital treatment must be defrayed by the individual student.

Accident Insurance

In addition, the College has approved a student accident medical reimbursement insurance plan which offers the student maximum benefits at low cost for the calendar year. This supplementary plan may relieve parents of possible financial strain in meeting this type of unanticipated expenses. A circular giving details of this plan will be mailed to all parents with the September bill.

Student Employment

Some employment is available at the College of the Holy Cross for students who need to earn part of their college expenses. To merit employment, students must meet certain academic, disciplinary and financial requirements. The compensation is proportionate to the number of hours of employment, and the amount earned is applied on the student's account with the College.

Placement Bureau

The Placement Bureau was established to render service to all Holy Cross men who registered with the Bureau. Under-graduates of all classes are urged to utilize the vocational guidance facilities of the Bureau at any time. Seniors and alumni registrants are given every possible assistance in finding satisfactory employment.

A series of vocational guidance talks is held during the year in which successful alumni and other business and professional leaders speak informally on the subject of their own vocations and answer questions. Further guidance is given through the dissemination of career books, pamphlets and monographs covering many vocations and occupations.

From time to time, especially during the spring term, employment officers of large corporations arrange through the Placement Bureau to come to the Holy Cross campus to interview seniors with regard to prospective positions with their organizations.

Dinand Library

There are approximately 200,000 volumes in the Dinand Library and they represent to a satisfactory degree every major classification of the Library of Congress, according to which system the Holy Cross collection is catalogued. Hundreds of classified pamphlets, periodicals and manuscripts in various fields increase the students' reference resources.

In the Reading Room is found the principal reference collections, encyclopedias, dictionaries, bibliographies, year books, concordances and other utensils, both general and special.

Occupying the entire lower floor of the east wing is the Browsing Room, designed for comfortable light reading and listening to classical music.

The Periodical Room is above and co-extensive with the Browsing Room. Over three hundred and fifty periodicals, from daily newspapers to annuals, both foreign and domestic, and in several languages, are received on subscription.

The west wing of the main floor houses the Museum, where are exhibited many of the choice, valuable and historic treasures of the College. Valuable paintings, sculptures, coins, books and pamphlets whose antiquity, rarity of edition give them a peculiar value, documents associated with the growth of the College, the history of the Church and the development of the country, autographs and manuscripts are some of the categories represented in the Museum exhibit. Of special interest is the growing collection of Jesuitana, which embraces the works of many early writers of the Society of Jesus.

Specialized science libraries are housed in the Biology Building and New Science Building. (CF. appendix for names of donors to libraries.)

Guidance

The College maintains an Office of Student Personnel to which a student may be referred for counsel. The Director of Student Personnel, by interviews and tests, contributes to the total adjustment of the student to college life.

Reserve Officers' Training Corps

The College of the Holy Cross offers, as part of its regular curriculum, the ROTC programs of the Air Force and the Navy. The programs of both services consist of one course each semester for four years (acceptable for credit towards a

degree), one drill period per week, and at least one summer training camp or cruise.

The Air Force program leads to a commission in the Air Force Reserve and prepares for specific duties in the Regular Air Force, the Air Force Reserve and the Air National Guard Units. The Naval ROTC program prepares qualified officers for the Navy and Marine Corps, the Naval Reserve and the Marine Corps Reserve.

Certain NROTC students have a portion of their costs borne by the United States Navy in accord with a contract with the College. This contract usually covers cost of tuition, fees (except refundable deposits) and necessary books. Students participating in this program are personally responsible for costs not borne by the Navy.

A description of both programs and the requirements for enrollment may be found in this section *Courses of Instruction* of this catalogue under "Air Science" and "Naval Science".

Entertainment

In addition to the special lectures given for all students, or for special groups by qualified lecturers, special theatrical productions, concerts and recitals are given during the year. Motion pictures are presented at least once a week.

Dormitory Accommodations

Under normal conditions the residence halls of Holy Cross have accommodations for fourteen hundred students. Each living room in the student dormitories is provided with the essential articles of furniture, such as desks, chairs, lockers, beds, mattresses, pillows. Boarding Freshmen contract privately with a Linen Service Company recommended by the College which will supply and launder two sheets, one pillow case, two bath towels and two hand towels each week of the school year at a charge of \$28.00 each year.

Language Laboratory

A Language Laboratory was installed on the ground floor of Carlin Hall in 1956 at a cost of \$20,000. Each of its forty booths is equipped with modern electronic instruments: tape recorder, microphone, headset, and a channel selector to receive any one of the five different programs transmitted from the console. The work performed in the Laboratory is coordinated with classroom activity, and is of invaluable assistance for the oral-aural approach to language.

College Expenses

General

Tuition

\$700.00 per academic year. This includes all ordinary charges except laboratory and special fees.

Board and Room

\$900.00 per academic year. This includes infirmary accommodation when required.

Some room accommodations will cost \$100.00 less per academic year.

The above expenses do not include textbooks, laboratory fees, or incidental expenses.

Payment of Bills

Bills for one half of each of these fees will be issued two weeks prior to the opening of each semester as follows:

BOARDING STUDENT	\$800.00
DAY STUDENT	\$350.00

This semester bill is payable in advance, but in no case later than the day of registration.

Bills for other fees (laboratory and special fees) are payable when rendered.

Deferred payment of bills may be sanctioned only by the Treasurer of the College of the Holy Cross after an application has been received in writing. For such concession a monthly fee at the rate of fifty cents per \$100.00 unpaid will be added to the account. The first of such charges will be added one month after payment is normally due and each month thereafter.

Make all checks and money orders payable to the Treasurer, College of the Holy Cross.

Special Fees

Application Fee

A fee of \$10.00 (non-refundable) must accompany all applications for admission to the College.

Acceptance Deposit

Upon receipt of formal notice of acceptance for admission to Holy Cross, all candidates are required to forward a (non-refundable) \$50.00 Deposit. Of this amount \$10.00 is apportioned to the student's Matriculation Fee; \$10.00 to the Room Deposit Fee and the remainder to the student's general account.

Change of Curriculum

This represents a major change in the education of the student. The fee for such a change will be \$10.00.

Change of Course

A change of course within a curriculum may be accomplished with the approval of the Dean. The fee for such a change will be \$5.00.

Examination Fee

A student obliged to take an examination, due to absence from or conditional failure in the regular examination, is charged a fee of \$5.00 for each such examination.

Extra Courses

The fee for such courses is at the rate of \$15.00 per semester hour credit.

Graduation Fee

A graduation fee of \$15.00 is assessed against each student who is a candidate for a degree.

Late Registration Fee

A student who fails to register at the appointed time is required to pay a fee of \$5.00.

Withdrawal from Course:

With the approval of the Chairman of the Department concerned, a student may withdraw from a course. The charge for this withdrawal will be \$5.00.

Radio Fee

A fee of \$10.00 for the year is charged to boarding students who have a radio or record player or television set in their room.

Room Damage Deposit

A deposit of \$10.00 is required of boarding students and a deposit of \$5.00 of day students against reasonable damage done by them.

These deposits, less any charge, are refundable at the end of the school year and will be credited on the first bill issued for the following year.

Laboratory Fees

Each student taking a laboratory course is liable for breakage, damage and loss of apparatus. In addition to the annual tuition fee, there is a fee for each laboratory course taken.

	Breakage Deposit	Fee
Chemistry 15; 16; 11; 12; 55; 56	each \$ 7.50	each \$12.50
Chemistry 41; 42	" 7.50	" 7.50
Chemistry 65; 66	" 17.50	" 12.50
Chemistry 57	" 15.00	" 10.00
Chemistry 201; 207; 208	" 15.00	" 25.00
Chemistry 203; 213	" 35.00	" 25.00
Chemistry 21; 25; 61; 62;	" 15.00	" 20.00
Chemistry 21: 32	" 20.00	" 20.00
Biology 67		10.00
Biology 41; 42		each 10.00
All Other Biology Courses		" 15.00
Physics 73; 74		" 5.00
All Other Physics Courses		" 10.00
Accounting		5.00
Language Laboratory		10.00

Students registered for a two semester science course will be billed for the full year course.

Breakage deposits, less cost of breakage and/or loss of equipment, are refundable at the completion of the course.

Students enrolled in the Air Force ROTC must deposit \$25.00 with the Treasurer of the College as a guarantee that they will return government property in good condition. This deposit is refundable.

The Trustees of the College reserve the right to change tuition rates and to make additional charges within the College whenever they believe it to be necessary.

Scholarships

General Information

A limited number of scholarships are awarded annually to incoming and enrolled students from the income on founded scholarships. At times and to the amount that the College's financial position permits, this income from founded scholarships is supplemented by grants from College funds. A few scholarships, restricted by the donors to definite categories of applicants, offer awards to the amount of full tuition and partial or total expenses for board and room at the College. All other scholarships only grant full or partial tuition. As the College has up to the present no Loan Fund, loans from the College for the payment of expenses are not granted.

Incoming Freshmen may apply to the office of the Dean of Admissions for a scholarship application form, along with their request for an application form for admission. Applications for scholarships by incoming freshmen should be filed with the office of the Dean of Admissions not later than March 15.

Students already enrolled should obtain a scholarship application form from the Office of Student Personnel. This scholarship application form should be filed with the Office of Student Personnel not later than July 1. Transfer students are not eligible for scholarship assistance until they have completed one year of study at Holy Cross College.

Awards to incoming freshmen will give recognition to those candidates who have manifested exceptional proficiency in their academic and extra-curricular achievements at the secondary school level and who without financial assistance would be unable to meet the expenses of a college education. The factors of promise of leadership, moral character and personality will also be considered. Scholarship applicants are required to take the full battery of the College Board Examinations as described on page 51. Candidates must arrange to have the test scores forwarded to the office of the Dean of Admissions.

Students already enrolled must attain a "B" average in all subjects to qualify for a scholarship, or for renewal of scholarship. Financial need, participation in extra-curricular activities, fidelity and loyalty to the traditions and ideals of Holy Cross are other factors that also will be considered.

All scholarships are granted on a year-to-year basis but will be renewed if the student continues to meet the requirements of the award. Application for the renewal of the scholarship for the succeeding year must be made not later than June 30th to the Office of Student Personnel. Forms for this purpose may be obtained from that office.

The following types of scholarships will be found amongst those listed on the following pages: 40, 41, 42, 43, 44, 45, 46, 47, 48, and 49.

General Scholarships

These are open to all incoming freshmen and enrolled students. The amount of the award is the income on the gift of the donor.

Restricted Scholarships

These by the intention of the donor are restricted to definite categories of applicants who often must be from a definite locality, parish or high school. An applicant, who wishes to apply for a restricted scholarship, should make certain that he is eligible for this scholarship.

Competitive Scholarships

Some scholarships by the intention of the donor are awarded on the basis of a competitive examination. The competitive examinations required by the College for eligible scholarship candidates are the College Board Examinations. Only incoming freshmen are eligible for competitive scholarships.

Holy Cross College Scholarships

There are a limited number of tuition or other partial awards that are made from the College funds, at the times and to the total amount that financial position of the College permits.

List of Scholarships

The Governor Ames Scholarship

Income on \$1,000. Established in 1887 by Governor Oliver Ames.

The Eugene A. Bickford Scholarship

Income on \$5,000. Founded in October, 1932, from the estate of Mrs. Mary A. Magenis of Brookline, Mass., in memory of her brother, the late Eugene A. Bickford, '96. The annual income on the \$5,000 to provide for the education of a deserving student under such conditions and regulations as imposed by the Faculty of the College.

The Rev. Charles E. Burke Scholarship

Income on \$3,000. Established in 1895. Appointment to be made from residents of St. Francis Parish, North Adams, Mass.

The James M. Burke Scholarship

Income on \$11,662.69. Established April 1, 1950 from the Estate of William H. Burke. The beneficiary is to be selected by the Trustees of the College.

The Robert J. Cairns Memorial Fund

Established September 24, 1953 by bequest from the estate of Alfred F. Finneran. Income on \$5,000. for scholarship aid to worthy students.

The Thomas Callaghan Scholarship

Income on \$2,000. Founded in 1914 by the late Thomas Callaghan of Leicester, Mass., limited to residents of Worcester County, "preference to be given to those preparing for the priesthood."

The Honorable James Bernard Carroll Scholarship

Income on 500 shares of Western Massachusetts Companies. Founded in 1939 by Mrs. James Bernard Carroll as a memorial of her husband, the late Justice James Bernard Carroll of the class of 1878. Restricted to graduates of St. Michael's Cathedral High School, Springfield, Massachusetts. Selection to be made by the Very Reverend Rector of Holy Cross College and the Reverend Rector of St. Michael's Cathedral, Springfield, on candidate's character, scholarship and extracurricular achievements.

The Frank D. Comerford Memorial Fund

Income on \$12,500. Established by Archibald R. Graustein in 1959.

The Connecticut Valley Alumni Scholarship

Income on \$1,725. Established in 1912 by the Alumni of Connecticut Valley.

The Maurice Connor Memorial Scholarship

Income on \$16,000. Established in 1929 by Mr. John T. Connor in memory of his brother, Maurice. The intention of the donor is to provide, for one boy, board, room, tuition and fee charges, as far as the income will provide them. The single beneficiary is to be chosen by the Pastor of St. Mary's Church, Westfield, Mass.

The Monsignor George S. L. Connor Scholarship

Income on \$26,625. Established October 18, 1955 by gift of Monsignor George S. L. Connor, '07. Selection to be made by the President of the College who shall give first preference to a worthy applicant who is a member of Holy Name Parish in Springfield, Massachusetts. If no such eligible candidate applies, then such a candidate who graduates from Cathedral High School shall be considered; if none such, then any applicant from the Springfield High Schools. Candidates must pass scholarship test as set up and be of good personality with evidence of leadership qualities.

The Thomas Costello and Anna Costello Scholarship

Income on \$10,000. Established December 9, 1947, by bequest of Susan A. Costello in memory of her parents, and by a bequest of \$5,000. from the estate of

Fanny Goodwin Hobbs. Income to be used to aid a student who lacks sufficient financial means for his education and who has expressed the intention of entering the priesthood.

The Crowley Family Memorial Scholarship I.

Income on \$12,000. Established July 2, 1947, by bequest of Miss Bridget T. Crowley of Springfield, Mass. Beneficiary to be selected by competitive examination and is open to students of the Parochial and Public High Schools of Springfield, Mass., who are morally, mentally and physically worthy and competent and who show promise of ability, but who have such limited financial means that, if not aided by a scholarship, would be unable to attend college.

The Crowley Family Memorial Scholarship II.

Income on \$12,000. Established 1947 by bequest of Miss Bridget T. Crowley of Springfield, Mass. Conditions same as the Crowley Family Memorial Scholarship I.

The Crowley Family Memorial Scholarship III.

Income on \$12,000. Established 1947 by bequest of Miss Bridget T. Crowley of Springfield, Mass. Conditions same as the Crowley Family Memorial Scholarship I.

The Right Rev. Monsignor Daniel F. Curtin Scholarship

Income on \$10,000. Established in 1921 by the Rt. Rev. Monsignor Daniel F. Curtin, Glens Falls, N. Y., to be appointed by the pastor of St. Mary's Church, Glens Falls, N.Y.

The Daniel T. Devine Scholarship

Income on \$15,000. Established in October 1945 from the estate of Mary F. Devine in memory of her brother, Rev. Daniel T. Devine. To be awarded as a result of competitive examination to the member of the graduating class of St. Mary's Parochial School, Milford, Mass., who has attended said high school for four years and who has been a member of St. Mary's Parish throughout his high school course.

The James F. Donnelly, '99 Scholarship

Income on \$15,000. Established May 11, 1956 by gift from the Sylvan Oestreicher Foundation.

The Eastern Connecticut Holy Cross Club Scholarship

Initial contribution of \$250. received February 2, 1955. Principal to be used for a deserving student from that area.

The Theodore T. and Mary G. Ellis Scholarship Fund

Founded in 1941 by the estate and through the generosity of the late Theodore T. and Mary G. Ellis. From the income of this fund, several scholarship awards of full or partial tuition are annually granted to residents of the City of Worcester.

The Rev. Patrick J. Finnegan, P. R. Scholarship

Income on \$5,032.60. Established November 28, 1955 by bequest from the estate of Rev. Patrick J. Finnegan. Income to be used to assist needy boys from Portsmouth, N. H.

General Motors College Plan Scholarship

A four year scholarship offered annually by General Motors Corporation. The amount of the award varies with the financial need of the recipient as determined by the General Motors Scholarship Committee.

The General Motors College Plan Scholarship

There will be 2 G.M. Scholarships available to the Class of 1963.

The "In Memory of David Goggin" Scholarship

Income on \$1,000. Founded in 1925 by Mrs. Catherine M. Goggin, in memory of David Goggin. Preference to be given a relative.

The Thomas F. Grogan Scholarship

A memorial of the deceased father of Dr. Richard H. Grogan, '35, and his brother, Fr. Thomas Grogan, S.J.

The Monsignor Griffin Scholarship

Income on \$1,000. Established in 1895, limited to residents of S. John's Parish, Worcester, Mass.

The Mary Agnes Haberlin Foundation

Income from fund of \$82,338.25 to be used for worthy students chosen by the President or Faculty of the College.

The John H. Halloran Scholarship I.

Income on \$12,000. Established in 1909 by Mr. John H. Halloran of New York, as a memorial of his brother, the late William J. Halloran, of Worcester, competition open to the country.

The John H. Halloran Scholarship II.

Income on \$12,000. Established in 1921 by Mr. John H. Halloran of New York, as a memorial of his brother, the late William J. Halloran, of Worcester. Selection to be made from the students of the public and parochial schools of Northampton, Mass., by means of competitive examinations.

The Rev. Jeremiah J. Healy Scholarship I.

Income on \$1,500. Founded in 1912 by the Rev. Jeremiah J. Healy, of Gloucester, Mass., for a candidate for the priesthood worthy of financial aid.

The Rev. Jeremiah J. Healy Scholarship II.

Income on \$1,500. Same as the "Rev. Jeremiah J. Healy Scholarship I."

The Richard Healy Scholarship

Income on \$8,000. Established in 1908 by Mr. Richard Healy of Worcester, open to competition for residents of Worcester County regardless of creed.

The Mr. and Mrs. Richard Healy Scholarship

Income on \$12,000. Established in 1916 by Mr. and Mrs. Richard Healy of Worcester, for benefit of a direct relative of donors.

The Rev. Frederick W. Heaney, S.J. Scholarship

Income on \$2,500. Established in 1920 by Miss Lillian Heaney, in memory of her deceased brother, the Rev. Frederick W. Heaney, S.J.

The John W. Hodge Scholarship

Income on \$4,466.20 Established in 1946 by a bequest from the late John W. Hodge to aid some worthy Catholic boy from Cambridge, Mass., the terms and conditions of which are to be fixed and regulated by the College.

The John T. Holland '17, Memorial Scholarship

Founded January 2, 1954 by gift from Matthew M. Berman. Income of \$7,000. To be used for worthy students selected by the President of the College.

The Holy Cross College Scholarships

These are a limited number of tuition or other partial awards that are made from the College funds, at the times and to the total amounts that the financial position of the College permits.

The John Collins Hurley Scholarship

Established April 28, 1953 by bequest of \$5026.67 from the estate of Margaret M. Hurley. Income to be used for education of worthy graduate of Durfee High School, Fall River, Mass.

The Warren Joseph Hurley Scholarship

Income on \$5,000. Established in 1929 by Mrs. Jeremiah J. Hurley in memory of Warren Joseph Hurley, ex-'29, for the benefit of one or more worthy students aspiring to the priesthood. Selection to be made by the President of the College.

The "In Memoriam" Scholarship

Income on \$8,000. Established in 1915 by an alumnus of the College for a deserving student.

The Otto Seindenburg King Scholarship

Income on \$10,000. Established in October, 1954 by gifts from Atty. John King, '25. Income to be used for a deserving student.

The Rev. Michael H. Kittredge Scholarship

Income on \$5,000. Founded in 1917 by Rev. Michael H. Kittredge, '75.

The Massachusetts State Council of Knights of Columbus Scholarship Fund

Income on \$5,000. Founded in 1937 by the Massachusetts State Council Knights of Columbus; open to members and sons of members of the Knights of Columbus residing and having their membership in the Order in Massachusetts. Award to be made by competitive scholastic examinations under the administration of the College of the Holy Cross.

The Patrick W. Lally Memorial Scholarship

Income on \$5,221.60. Established in March 1954 from the estate of James Lally to be awarded to a worthy graduate of St. Mary's High School, Milford, Mass., who will be selected by the President of the College of the Holy Cross.

The Michael J. Lawlor Scholarship

Income on \$5,000. Established in February, 1949, by bequest from the late Retta M. Lawlor. Income to be used to aid a bright and needy student, resident of Waterbury, Conn., who, in the opinion of college authorities, shall be deserving of financial assistance.

The John J. Leonard Scholarship of the M.C.O.F.

Income on \$6,000. Founded in 1926 and restricted to members, or sons of members, of the M.C.O.F., selection to be made by competitive examinations.

The Rev. John G. Mahoney, S.J., a Former Professor at the College and James E. Mahoney, '10, Memorial Scholarship

Income on \$20,000. Founded in 1946 by Mrs. Edward C. Donnelly in memory of her brothers; to be awarded to a deserving student studying for the degree of Bachelor of Arts in the Classical Course who is to be selected by the President of this College.

The Henry Vincent McCabe Scholarship

Income on \$5,000. Established in 1916 by the late Mary McCabe of Providence, R. I., for a deserving student.

The Rev. Denis F. McCaffrey Scholarship

Established September 29, 1953 by bequest of \$700. from the estate of Rose A. McCaffrey. For a worthy student.

The Peter McCord Scholarship

Initial gift of \$66.00 from Mary Lambert McCord for a deserving student.

The Rev. David F. McGrath Scholarship I.

Established in 1907 by the Rev. David F. McGrath, '70, beneficiary to be selected by competitive examinations. Restricted to graduates of St. Mary's Parish School, Milford, Mass., if there be more than one eligible candidate. If but one such, graduates of Milford Public High School may be admitted to competition; if but one candidate from both schools anyone otherwise eligible in the State to be admitted to competition. The beneficiary will receive board, lodging and tuition for an academic year of two semesters. All other expenses must be met by the one holding the scholarship.

The David F. McGrath Scholarship II.

Established in 1920 by the Rev. David F. McGrath, '70; conditions same as the "Rev. David F. McGrath Scholarship I."

The David F. McGrath Scholarship III.

Established in 1920 by the Rev. David F. McGrath, '70; conditions same as the "Rev. David F. McGrath Scholarship I."

The Monsignor John W. McMahon Scholarship

Income on \$5,000. Founded in 1938 under provision of the will of Rt. Rev. Msgr. John W. McMahon, '67, to give scholarship aid to a Holy Cross student to be designated by the Reverend Pastor of St. Mary's parish, Charlestown, Boston, Massachusetts, preference being given to students coming from said St. Mary's parish.

The Patrick J. Murphy Scholarship

Income on \$1,500. Established in 1914 by Mrs. Ellen M. Murphy, as a memorial to her husband, the late Patrick J. Murphy, Worcester, Mass.

The Monsignor Richard Neagle Scholarship

Income on \$35,000. Founded in 1943 by His Excellency the Honorable Alvan T. Fuller, former Governor of the Commonwealth of Massachusetts, in memory of the late Right Reverend Monsignor Richard Neagle of the Class of 1873, to assist boys qualified, in the opinion of the faculty, but who otherwise could not afford such an expenditure as would be necessary to enjoy the educational and religious advantages of the College of the Holy Cross.

The Denis F. and Loretto Radel O'Connor Scholarship

Income on \$20,000. Established May 26, 1955 by Dr. Denis F. O'Connor, '93, to be used for a worthy student to be selected by College authorities.

The O'Driscoll Scholarship

Income on \$3,000. Established in 1874, for a student (limited to residents of the City of Worcester), who is a candidate for the priesthood and is selected by the Bishop of Worcester or his delegate.

The May and Sylvan Oestreicher Scholarship

Established December 30, 1957 by gift of Sylvan Oestreicher. Income on \$17,043.57.

The Mary C. O'Neil Fund for Bristol County Students

Established January 7, 1955 by gifts from Margaret T. O'Neil. Income on \$2,900. to be used to aid a student from Bristol County.

The Rev. Daniel H. O'Neill Scholarship I.

Income on \$1,000. Established 1895, limited to residents of St. Peter's Parish, Worcester, Mass.

The Rev. Daniel H. O'Neill Scholarship II.

Income on \$1,500. Established in 1908, limited to the residents of the City of Worcester.

The Rev. Dr. Patrick B. Phelan Scholarship I.

Income on \$8,000. Established in 1917 by Rev. Dr. Patrick B. Phelan, '69; open to competition for graduates of the Sacred Heart School, Holyoke, Mass.

The Rev. Dr. Patrick B. Phelan Scholarship II.

Income on \$8,000. Same as "Rev. Dr. Patrick B. Phelan Scholarship I."

The David H. Posner and Mary Murphy Posner Foundation

Founded July 1, 1957 by bequest of \$10,000.00 from the Estate of Mary M. Posner. Income to be used toward tuition of worthy students.

The Rev. John J. Power Scholarship

Income on \$1,500. Established in 1907 by the late Rev. John J. Power, D.D., limited to residents of St. Paul's Parish, Worcester, Mass.

The Mary A. Prendergast Scholarship

Income on \$5,000. Founded in 1945 under the will of the late Mary A. Prendergast for deserving orphan students.

The "Quid Retribuam" Scholarship

Income on \$8,000. Established in 1907 by a friend of Education in gratitude for Divine favors; if not filled by founder, competitive examinations will be held.

The Patrick W. Rafferty Scholarship

Income on \$2,000. Established in 1920 and open to competition among deserving students of the City of Worcester.

In Memory of Dennis M. and Josephine F. Reardon Scholarship

Established January 11, 1952 by bequest of \$10,575.39 from the estate of Josephine F. Reardon. Income to be used to aid a worthy student preparing for the holy priesthood.

The John Reid Scholarship

Income on \$1,500. Established in 1894, limited to residents of Worcester.

The Catherine F. Reilly Scholarship

Established June 1, 1955 by bequest of \$12,500. from the estate of Joseph J. Reilly, '04, in memory of his mother. Income to be used for a worthy student to be selected by College authorities.

The James H. Reilly Scholarship

Established June 1, 1955 by bequest of \$12,500. from the estate of Joseph J. Reilly, '04, in memory of his father. Income to be used for a worthy student to be selected by College authorities.

The Reilly Memorial Scholarship

Income on \$1,000. Founded in 1922 by the late Joseph J. Reilly, '04.

The Mary J. Robinson Scholarship

Income on \$11,297. Established in 1943 by the late Mary J. Robinson in memory of her mother and father and brothers to assist deserving young men of the Roman Catholic Faith in obtaining a collegiate education at the College of the Holy Cross.

The Rochester Alumni Scholarship

Initial gift of \$50. for a deserving student from Rochester, N.Y.

The Rev. William H. Rogers Scholarship

Income on \$10,000. Established in 1918 by Rev. William H. Rogers, '68.

The Hon. John E. Russell Scholarship

Income on \$1,500. Established in 1907 by a Friend of the College.

The Elizabeth Spang Scholarship

Income on \$5,000. Founded in 1936 by the will of Elizabeth Spang of West Haven, Connecticut. This income to be used toward the education of a "student of

Holy Cross College whom the governing body of said College may deem to be in need of financial assistance for his college work and worthy of said scholarship."

The Springfield Club Scholarship

A half-tuition scholarship of \$250. which the Holy Cross College Alumni Club of Springfield, Massachusetts has undertaken to provide annually. The recipient of the award will be selected by Board of Admissions at the College. It is subject to renewal under usual conditions. Preference will be given candidates from the city of Springfield or the Springfield area.

In Memory of Helen M. and John F. Tinsley Scholarship

Established November 20, 1953 by bequest of \$55,000. from the estate of John F. Tinsley. Income to be used to assist worthy students selected by the President of the College.

The Scholler Foundation Scholarship

Established October 24, 1955 by initial gift of \$1,000.

The Rev. David W. Twomey, S.J. Scholarship

Income on \$11,100.00. Established October 10, 1955 by gifts from family and friends of Fr. Twomey, S.J. Income to be used to aid a worthy student.

Union Carbide Scholarships

Offered by the Union Carbide Educational Fund of the Union Carbide and Carbon Corporation, these scholarships offer deserving students who are interested in a business career the complete cost of tuition for a full, four-year academic course. In addition, they provide reasonable allowances for the necessary books and required fees.

The Rev. Robert Walsh Scholarship

Income on \$1,000. Established in 1895, limited to residents of the Immaculate Conception Parish, Worcester, Mass.

The Stephen W. Wilby Scholarship

Income on \$7,462.06. Founded by the Naugatuck Valley Alumni Association and friends in Connecticut.

Admission to the College

General—Freshman Class

Candidates for admission to the College of the Holy Cross must meet certain standards of quantitative and qualitative excellence and give evidence of motivation, maturity and emotional stability.

The Committee on Admissions will evaluate the applicant's qualifications in terms of the traditions and standards of the College. Possession of the required scholastic credentials is not to be construed as a guarantee of acceptance. More pertinent is the unspoken promise of the applicant that he will achieve the fullness of dignity of Christian manhood in the arts, the sciences, a profession or in business.

Application

All correspondence relative to the procedure on application and all inquiries on matters of interest to prospective candidates should be addressed to The Dean of Admissions.

Method of Admission

Write to The Dean of Admissions for application form and pre-application card.

Return the pre-application card with non-refundable fee of ten dollars.

Arrange to take College Board Examinations and to have the scores sent to the Office of Admissions.

Arrange to have your school principal return the completed application form to The Dean of Admissions before 1 April.

Family physician should furnish certified statement of good health.

Entrance Examinations

All applicants must take the College Entrance Board Scholastic Aptitude Test in December, January, or February of their last year in secondary school, as well as the College Board Achievement Tests in December or March. The three achievement tests must include the test in English Composition, one in a modern foreign language which has been studied two years in secondary school, and a third to be freely chosen by the student.

The General Educational Development Test and the Navy College Aptitude Test are not accepted for entrance into college in place of the College Entrance Board Tests.

Basis for Admission

The decision of the Board of Admissions will be based on the following factors:

1. Graduation and academic performance in secondary school.
2. The results of the pre-college tests.
3. The recommendation of the high school principal.
4. The health, moral character, extra-curricular interests and achievements of the candidate.

Advanced Placement

In 1952, the College Entrance Examination Board instituted the Advanced Placement Program in order to allow the superior student to advance more rapidly and more richly in his chosen field. Holy Cross College policy presupposes that the candidate has pursued, during his senior year in high school, a strictly Freshman-college-level course in the subject in which he seeks advanced placement, and has attained, in the Advanced Placement Test of the College Board program, a test-score acceptable both to the Committee on Admissions and the Chairman of the particular department concerned. The score must never be under a "3", and usually, not under a "4". Beyond this, there is no general, fixed policy, since each candidate's record is studied individually, and the decision regarding advanced placement is made on the merit of each individual's record of achievement. The College will also welcome for early admission those superior students, particularly in Jesuit secondary schools, who have completed the regular, four-year course at an earlier date.

Honors Program

The College offers an Honors Program to students in all curricula leading to the degree of Bachelor of Arts or Bachelor of Science. Gifted students will be invited to participate in the Honors Program and will be awarded the Honors Degree on the basis of distinguished course grades, written and oral examinations, and a thesis. In addition to homogeneous grouping, Honors students will be introduced to such liberal courses as Music Appreciation and Fine Arts. Competence in more than one modern foreign language will be recommended to them. They will be given the opportunity for seminar work in their major field as well as in philosophical studies. This sharing of a common intellectual experience will deepen and widen the scholarship of the student.

Tentative acceptance of students for the Honors Program will be made by the Committee on Admissions. At the end of the first semester of the Freshman year, the recommendations of Chairmen of Departments and instructors will be used as a basis for judgment of the qualifications of the candidates for the Honors Degree.

Quantitative Admission Requirements

Students approved for admission to the Freshman Class are selected from applicants who are graduates of approved secondary schools and who offer sufficient credits to satisfy the minimum admission requirements of fifteen entrance units in approved subjects.

All units submitted to satisfy entrance requirements must be recognized by the secondary school as credits towards graduation in a college preparatory course. Commercial, vocational or industrial subjects will not be accepted as entrance units. Candidates for admission may submit entrance units in the following subjects:—

	Units		Units
English I (Grammar and Composition)	2	Elementary French	1
English II (Literature)	2	Intermediate French	1
Ancient History	1	Advanced French	1
European History	1	Elementary German	1
American History	1	Intermediate German	1
English History	1	Advanced German	1
American History and Civil Government	1	Elementary Italian	1
World History	1	Intermediate Italian	1
Problems of Democracy	1	Advanced Italian	1
Social Studies	1	Elementary Spanish	1
Economics	½ to 1	Intermediate Spanish	1
Geography	½ to 1	Advanced Spanish	1
Law	½ to 1	Mathematics	3 to 4
Civil Government	½ to 1	Mechanical Drawing	½ to 1
Latin (Elementary)	1	General Science	1
Latin (Caesar)	1	Chemistry	1
Latin (Cicero)	1	Physics	1
Latin (Virgil)	1	Biology	1
Greek (Elementary)	1	Astronomy	1
Greek (Xenophon's Anabasis)	1	Physical Geography	1
Greek (Homer's Iliad)	1	Botany	1
		Zoology	1

UNIT REQUIREMENTS FOR THE VARIOUS COURSES

To be eligible to enroll for any one of the several courses included in the curriculum a specified number of units in required subjects must be offered. Elective subjects, sufficient to bring the total to 15 units, will be accepted but these additional units must be included in the list of approved subjects. The following table summarizes the required and elective units to be offered by candidates for the various degrees:

Bachelor of Arts (Greek Curriculum)

Subject	Units
Latin	3 to 4
English	4
Mathematics	3
History	2
*Modern Foreign Language (Recommended)	2
Greek or Electives	1 to 4

Bachelor of Arts (Mathematics Curriculum)

Subject	Units
Latin	3 to 4
English	4
Algebra	2
Mathematics	3 to 4
History	2
*Modern Foreign Language (Recommended)	2
Electives	1 to 2

Bachelor of Science (Biology)

Subject	Units
English	4
Mathematics	3
*Foreign Language (Classical or Modern)	2
History	2
Science	1 to 2
Electives	2 to 3

*No credit will be allowed for a single year of a foreign language. Candidates who present no secondary school credit in a modern foreign language must register in one or other of the elementary courses offered in modern foreign languages and continue their study of the language chosen throughout sophomore year. A comprehensive examination will be given at the completion of the sophomore year language course. Those who fail to satisfy the reading requirements must continue their study of the language in junior year. German is the prescribed modern foreign language for students in the Chemistry curriculum.

Bachelor of Science
(Chemistry, Mathematics or Physics)

Subject	Units
English	4
Mathematics	3 to 4
Science	1 to 2
*Foreign Language (Classical or Modern)	2
History	2
Electives	1 to 2

Bachelor of Science
(Business Administration, General History, Education or English)

Subject	Units
English	4
Mathematics	3
Electives	4 to 5
*Foreign Language (Classical or Modern)	2
History	2

ACCEPTANCE DEPOSIT

Candidates, upon receipt of final notification of the acceptance of their applications, are obliged to forward a guarantee fee of fifty dollars (\$50).

REGISTRATION

Freshmen and new students will receive all information relative to registration upon application to the Office of the Dean of Admissions.

All students must report to the Lounge Room, O'Kane Hall at the time appointed, and fill out enrollment cards for the semester. A certificate from the Treasurer for payment of the semester bill must be presented to the Registrar.

For failure to register at the appointed time, students will be charged a late registration fee of five dollars.

Before registration, each student must file in the Office of the Dean of Admissions a certified statement of good health from his physician. Failure to fulfill this requirement by the day of registration will entail an additional fee of five dollars.

*No credit will be allowed for a single year of a foreign language. Candidates who present no secondary school credit in a modern foreign language must register in one or other of the elementary courses offered in modern foreign languages and continue their study of the language chosen throughout sophomore year. A comprehensive examination will be given at the completion of the sophomore year language course. Those who fail to satisfy the reading requirements must continue their study of the language in junior year. German is the prescribed modern foreign language for students in the Chemistry curriculum.

FRESHMAN WEEK PROGRAM

For a period of several days following upon Registration and before the formal opening of classes all Freshmen are required to participate in the orientation program conducted under the supervision of the Dean of Freshmen-Sophomores and the Heads of Departments. By this means the College seeks to aid the new student in properly adjusting himself to college life and to impress him with the distinctive advantages and educational opportunities which the College offers to its undergraduates. During this period Freshmen will have an opportunity to become acquainted with the physical features of the campus, to inspect the various college buildings and to note the location of lecture halls and classrooms. The sequence of guidance lectures given at this time by various members of the Faculty is planned to equip the student with a knowledge of the aims and scope of the various courses and to advise him with regard to efficient study techniques and proper use of the Library. A series of placement tests will be given to all Freshmen during this period.

ADMISSION TO ADVANCED STANDING

A student honorably dismissed from another college may be considered for admission to the College of the Holy Cross on advanced standing. After an appraisal of his previous college record, credit will be allowed for such courses as are equivalent to courses offered at Holy Cross College and which have been passed with a grade of at least C. Such a student will be required to complete satisfactorily all the prescribed courses leading to the Bachelor's degree and to complete at least the full Senior year's work at Holy Cross College. An applicant for advanced standing should have the proper officials of institutions previously attended forward to the Office of the Dean official transcripts of secondary school and college records.

Students accepted with advanced standing are eligible for scholarship assistance until they have completed one year at this College, and meet the other requirements for qualification.

VETERANS

Returning veterans who, prior to their enlistment, satisfactorily completed their secondary school studies and are eligible for training under the educational benefits of Public Laws 550 and 894 will be accepted for admission to Holy Cross as entering Freshmen or with advanced standing, contingent upon their meeting the entrance requirements.

Servicemen who apply for admission should submit a brief statement of their previous educational background, including the name and location of schools they have attended. Veterans who wish to support their application

with supplementary information as to their academic competence and mental proficiency, may arrange to take the General Educational Development Test through the facilities of the U. S. Armed Forces Institute. The GED Test may not be offered in place of the CEEB Aptitude Tests, nor a State High School Equivalency Certificate, for an official four-year high school transcript.

Veterans applying for admission to the Freshman class should write to the Dean of Admissions. Veterans applying for admission with advanced standing should write to the Office of the Dean.

Academic Information

THE COLLEGE YEAR

The College Year begins on the third Tuesday of September and ends on the second Wednesday of June, with recess periods at Christmas and Easter.

It is constituted of two semesters of sixteen weeks each.

CREDIT HOURS

A semester hour represents a course which meets once a week throughout the semester. In ordinary lecture courses, the class period is of fifty minutes duration; in cases in which the class period is conducted in the style of a conference or seminar, the period is longer or a greater number of them is required to give an equivalent number of credits; in all laboratory work, the length of a period required to give a semester hour credit is twice the length of the ordinary lecture period.

CLASS HOURS

There are eight class periods each day, Monday through Friday. Class or laboratory periods begin at 8:40 A.M. and continue to 5:30 P.M., with an hour at noon for lunch period.

The morning class periods are from 8:40 A.M. to 12:30 P.M.; the afternoon periods from 1:40 P.M. to 5:30 P.M.

ATTENDANCE AT COLLEGE EXERCISES

Students are required to be diligent in the pursuit of their studies and regular in their attendance of classes. Those who fail to meet these requirements will be requested to withdraw.

Each student must attend all of the classes in which he is enrolled, including elective lectures on subjects intimately connected with classroom study, and all chapel exercises. Absence from Class Exercises will be tolerated only in the event of illness, representation of the College in a major extra-curricular activity, family obligations.

Cumulative absences for any reason from Class Exercises totaling more than 15 per cent in any regular course of instruction will result in loss of academic credit for the course and the necessity of repeating that course.

Permission for make-up tests, examinations, and academic obligations unfulfilled because of involuntary absence will be granted by the Dean of Studies only. Such tests and examinations must be accomplished within 2

weeks after return to classes. The Charge for semester make-up examinations will be \$5.00.

Absence from class on the eve of major holidays will be construed as a voluntary absence and will reduce the percentage of permitted involuntary absences (cf. above) to 10 per cent.

Absence from class functions will be reported daily by Instructors to the Office of the Dean of Men.

A student who is repeatedly absent from classes will be required by the Dean of Studies to furnish proof of academic proficiency.

Students who are late for class will be reported to the Dean of Men for disciplinary action.

Only in extraordinary cases will exemption from these regulations be granted.

GRADING SYSTEM

Reports of academic grades are sent to parents at the end of each semester.

A semester grade is the weighted average of the class mark and the semester examination mark. In determining this grade 60% will be given for the class mark and 40% for the semester examination mark. The class mark includes marks received in quarterly tests, term papers, written and oral quizzes, and laboratory work in courses where laboratory work is a requirement.

Dean's List: First Honors—cumulative average of A (100-90).

Second Honors—cumulative average B (89-85).

A grade of C (74-70) or less disqualifies for honors.

A semester grade of C+ is the minimum Recommendation Grade, i.e. a cumulative average of at least C+ (75) for all subjects in Senior year is required for recommendation by the Dean of Studies to a Professional or Graduate School. For recommendation to certain Professional or Graduate Schools a grade of B may be required.

A semester grade of D (60) is a Passing Grade.

A semester grade of F (below 60) is a Deficient Failure Grade. A student who fails to attain a semester average of D in any course is deficient in that course and, to attain credit for it, he must repeat the course.

These regulations respecting semester examinations and semester grades apply also to treatise examinations in Philosophy.

REQUIREMENTS FOR ADVANCEMENT

To be eligible for advancement to the next higher grade a student must be free of all deficiencies. Deviation from this rule will be allowed by the Committee on Standards only in cases of extreme hardship.

ACADEMIC PROBATION

1. Students to whom official warning has been given during a semester that their academic record in any course is unsatisfactory, will be considered to be "on probation."
2. A student who acquires a deficiency in any course during a semester is considered to be "on probation."
3. Students "on probation" will not be allowed to participate in extra-curricular activities and will forfeit off-campus privilege during the period of probation.

ACADEMIC FAILURE

Students who come under the following classifications will be considered to be academically unsatisfactory and will be asked to withdraw from the College.

1. A student who at the end of a semester is "deficient" in three or more courses.
2. A student who is "deficient" in three or more subjects at the end of an academic year.
3. A student who during his college course has accumulated an excessive number of deficient failures, even if these have been removed by attendance at Summer School.

CONDITIONAL FAILURE

Freshmen who present satisfactory work in any course during the semester but fail the final examination will be allowed a re-examination on the recommendation of the Instructor. The highest grade for the course after the examination will be a passing grade. By failure in this second examination the Freshman incurs a deficiency. The charge for re-examination will be \$5.00.

CREDIT FOR SUMMER SESSION WORK

The approval of the Dean of Studies is requisite to gain credit for work done in summer school at another college. Summer School courses must be passed with a grade of C or better to be recognized by the College as degree credits.

EXTRA COURSES

A student in either Sophomore or Freshman class is not permitted to carry a greater number of hours than the normal number required in his course. Upperclassmen with a general average of B (80) or over may, with the approval of the Dean, register for an extra course.

VOLUNTARY WITHDRAWAL FROM COLLEGE

A student who withdraws voluntarily from the College is entitled to honorable dismissal under the following conditions:

1. He must be in good standing on the records of the College, i.e. not liable to dismissal on account of failures, excessive absence, or breach of discipline.
2. He must return all College property.
3. All financial indebtedness must be settled with the College.
4. He must give proper notification to the Dean of his intentions to withdraw from the College.

TRANSCRIPTS OF COLLEGE RECORD

Each student is entitled, on leaving the College, to a transcript of his record free of charge if his financial obligations to the College have been fulfilled. For additional transcripts a fee of one dollar will be charged.

No transcripts will be issued during the periods of Commencement, Registration and Examinations.

FOREIGN STUDY

In the Junior year students who have achieved B⁺ academic work have the option of studying in Europe or remaining at Holy Cross. If the student elects to study in Europe, and is approved by the Faculty Committee on Fellowships, he must follow a course of study at an approved University. Applications for approval will be made at the Office of Student Personnel.

Grades and Quality Point

Beginning in September 1959, the grading system will be changed and will be applicable to members of the Class of 1963.

A student's standing will be determined by the results of examinations, classroom work and assignments. The quality of the student's work will be graded as follows:

A—Outstanding; an unusual degree of scholarly initiative. B+—Superior work; eligibility for Honors Program. B—Intelligent application and grasp of subject matter. C+—Lowest recommendation grade for graduate work. C—Quality of work done by majority of students. D—Mastery of the minimum of subject matter. F—A failure. Course must be repeated. FA—Failure because of excessive absence. W—Official withdrawal. WF—Withdrawal while failing. WP—Withdrawal while passing. I—Incomplete. Incomplete grade may be removed with approval of the Dean by submission of work not later than one week after the final examination in the Course.

Absence from Final Examination—approval of Dean is necessary for deferred examination.

Grade points determine the student's general average and measure the quality of the student's work as credit hours measure the quantitative requirements.

The grade "A" is assigned 4.0 points for each credit hour completed.

The grade "B"+ is assigned 3.5 points for each credit hour completed.

The grade "B" is assigned 3.0 points for each credit hour completed.

The grade "C+" is assigned 2.5 points for each credit hour completed.

The grade "C" is assigned 2.0 points for each credit hour completed.

The grade "D" is assigned 1.0 points for each credit hour completed.

the grade "F", "FA", "WF" is assigned 0. for each credit hour.

HONOR GRADES

The following criteria determine honor grades:

GRADUATION HONORS

Summa Cum Laude: Cumulative average of 3.87 or above.

Magna Cum Laude: Cumulative average of 3.70-3.86

Cum Laude: Cumulative average of 3.50-3.69

DEAN'S LIST

First Honors: A non-cumulative average of 3.7 or above.
Second Honors: A non-cumulative average of 3.5-3.69

Requirements For Good Standing

FRESHMAN YEAR

Any student whose quality point average at the end of the first semester is below 1.5 will be on probation for the second semester.

Any student not having at least 1.0 at the end of the second semester will be dismissed.

Any student having 1.0 or more but less than 1.5 will be on probation for the first semester of second year. A student who has a cumulative average of 1.5 or better at the end of freshman year advances unconditionally.

SOPHOMORE YEAR

Students who do not attain a non-cumulative average of 1.75 at the end of the semester will be subject to dismissal or placed on probation at the discretion of the Committee on Academic Standing.

A student must have a cumulative average of 2.0 to advance unconditionally to junior year.

Any student with a cumulative average greater than 1.75 but less than 2.0 will be placed on probation for the first semester of junior year.

Any student with a cumulative average lower than 1.75 will be subject to dismissal.

JUNIOR YEAR

Students not attaining a cumulative average of 2.0 at the end of this semester will be subject to dismissal or placed on probation at the discretion of the Committee on Academic Standing.

Any student who does not have a cumulative average of 2.0 or better at the end of junior year will be subject to dismissal.

SENIOR YEAR

Students not attaining a cumulative average of 2.0 at the end of this semester will be placed on probation.

Students who do not have a cumulative average of 2.0 or better will not graduate.

ACADEMIC PROBATION

Academic probation is not a penalty but a warning and an opportunity to improve. It involves interviews for diagnosis of difficulties and for checking on recovery. It also involves mandatory restriction of extra-curricular activity.

Students on academic probation may not represent the College in inter-collegiate activities. Nor may they participate in intracollegiate activities, except insofar as the Committee on Academic Standing may permit. A student should not, however, be excluded from spiritual activities such as the Sodality, the Choir, the Sanctuary Society and the League of the Sacred Heart. Students on academic probation will not be excluded from intramural athletics.

A student who violates the restrictions of probation will be subject to dismissal.

CONDITIONAL FAILURE

Freshmen who present satisfactory work in any course during the semester but fail the final examination will be allowed a re-examination on the recommendation of the Instructor. The highest grade for the course after the examination will be a passing grade. By failure in this second examination the Freshman incurs a deficiency. The charge for re-examination will be \$5.00.

QUANTITATIVE REQUIREMENTS

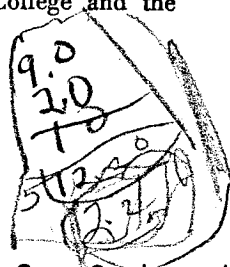
The quantitative requirements of the curriculum for which the student is registered must be met each year. Course failures or deficiencies must be made up in an approved summer school. Credit for such a course will not be granted unless prior consent of the Dean has been given.

DISQUALIFICATION OF STUDENT

Any student failing three courses in any one semester will be dismissed.

Any student on probation for more than two consecutive semesters will be dismissed.

In cases not covered by the foregoing, the Committee on Academic Standing has the authority to rule for the better interests of the College and the educational progress of the student.



Requirements for Degrees

The College of the Holy Cross offers curricula leading to the degrees of Bachelor of Arts (B.A.), Bachelor of Science (B.S.) and Master of Science* (M.S. in Chemistry).

BACHELOR OF ARTS HONORS DEGREE

This course is established to foster classical studies. Based on the time-honored principles of the famous Ratio Studiorum, it is calculated to demand comprehensive and independent work.

Holy Cross considers this course as representative of the classical principles for which she has long been noted and well adapted to develop fully and harmoniously the intellectual, moral and physical powers of the student.

To be recommended for this degree the candidate must attain a "B" grade in seventy-five per cent of his courses and at least a "C+" grade in the remaining twenty-five per cent. The scholastic success of the student is noted in his degree by the distinction of honors, honors cum laude, honors magna cum laude, and honors summa cum laude. Students who fail to attain these grades may be recommended for a degree without honors. Honor students are expected to do original and intensive work in all subjects and are accountable for seminars in the major fields, Philosophy and Theology.

BACHELOR OF ARTS DEGREE

WITH GREEK. This course offers the same plan of study as the Bachelor of Arts Honors course. It differs from the Honors course in that the work is less intensive and demanding. This course is offered to those who wish to pursue the traditional classical curriculum without meeting the exacting requirements of the Honors Course.

WITH MATHEMATICS** This course represents a plan of study which differs from the Honors course in that mathematics is substituted for Greek in the Freshman and Sophomore years, and the grade D is the minimum required grade. This course is offered to those who are proficient in mathematics and wish to continue the study of that subject in college while following the cultural sequence of the Bachelor of Arts curriculum.

*Requirements for this degree will be found on page 131.

**Beginning in September 1959 and with the Class of 1963 qualified students may register for the Honors Program in the Curricula leading to the Bachelor of Arts with Mathematics and the Bachelor of Science degrees.

BACHELOR OF SCIENCE DEGREE *

Students who do not have the language requirement of Latin and who wish to select a curriculum which will prepare them for a particular career, may choose a curriculum in one of the following fields leading to the Bachelor of Science Degree: Biology, Chemistry, Physics, Mathematics, Business Administration, History, Social Sciences, Education or English. These courses, in addition to the work in the field chosen, offer a balanced training in language, literature, history, philosophy, psychology and ethics.

To be recommended for one of the above degrees a student must satisfactorily complete all course requirements in his field of concentration, e.g. a candidate for the Bachelor of Science degree in Biology must complete satisfactorily all courses required by the College for this degree.

Pre-Medical and Pre-Dental Courses

Courses leading to the Bachelor of Arts degree and to the Bachelor of Science degree in Biology provide adequate preparation for admission to medical and dental schools.

Pre-Legal Courses

Elective sequences in pre-legal subjects are included in the Arts curriculum in Junior and Senior years for those students who wish to satisfy the prerequisites for admission to law school.

The courses in Business Administration, History, Social Sciences and Education also provide adequate preparation for admission to law school.

Scholastic Distinction

Scholastic distinction in all courses is noted on the candidate's degree by the qualification "cum laude", "magna cum laude", or "summa cum laude".

R.O.T.C. Students

Appropriate substitution in all courses is made for students enrolled in the Air Force and Naval R.O.T.C. Units.

*Beginning in September 1959 and with the Class of 1963 qualified students may register for the Honors Program in the Curricula leading to the Bachelor of Arts with Mathematics and the Bachelor of Science degrees.

Thesis Requirements

To be recommended for any degree a student must, in addition to the satisfactory completion of all courses required for his degree, submit during his Senior year an acceptable thesis of at least 3000 words on a special subject approved by the Chairman of the Department in which he writes his thesis. For students majoring in Chemistry, an experimental thesis is optional. The typewritten copies of the thesis must be submitted to the Dean at the appointed time.

Curriculum Requirements

/ Honors and Non-Honors

The Bachelor of Arts Degree

FRESHMAN				SOPHOMORE			
English			11, 12	English			21, 22
Theology			11, 12	Theology			21, 22
Modern Foreign Language			11, 12	Modern Foreign Language			23, 24
"	"	"	13, 14	"	"	"	25, 26
"	"	"	15, 16	"	"	"	27, 28
History			11, 12	History			21, 22
Latin			11, 12	Latin			21, 22
Greek			11, 12	Greek			21, 22
"			13, 14	"			25, 26
"			15, 16	Mathematics			21, 22
Mathematics			11, 12				
JUNIOR				SENIOR			
Philosophy			41, 42	Philosophy			51, 52
"			43, 44	"			53, 54
Theology			41, 42	"			55, 56
				Theology			51, 52
Elective Science			41, 42				
Electives in Field				Electives in Field			
Electives in Field				Electives in Field			

¹ Greek is a required subject for the Bachelor of Arts Honors Degree. Students not offering Greek entrance units begin their study of the language in the Freshman Year. Beginning in 1959 Greek will not be required.

² To fulfill the science requirement of Junior Year, one of the following may be taken: Biology 41, 42; Chemistry 41, 42; Physics 41, 42; Physics 43, 44.

³ Elective courses may be chosen from one of the following fields: English Classical Languages, Romance Languages, German, History, Economics, Education, Political Science, Sociology, Mathematics and the Natural Sciences.

Pre-Medical & Pre-Dental

FRESHMAN			SOPHOMORE		
English	11, 12		English	21, 22	
Theology	11, 12		Theology	21, 22	
Modern Foreign Language	11, 12		Modern Foreign Language	23, 24	
"	"	"	"	"	"
"	"	"	"	"	"
	13, 14			25, 26	
	15, 16			27, 28	
Chemistry	15, 16		Chemistry	25, 26	
Latin	11, 12		Latin	21, 22	
Greek	11, 12		Greek	21, 22	
"	13, 14		"	25, 26	
"	15, 16		Mathematics	21, 22	
Mathematics	11, 12				
JUNIOR			SENIOR		
Philosophy	41, 42		Philosophy	51, 52	
"	43, 44		"	53, 54	
Theology	41, 42		"	55, 56	
			Theology	51, 52	
History	41, 42		Biology	65, 66	
			"	67	
Biology	55, 56		Chemistry	65, 66	
Physics	45, 46				

The Bachelor of Science Degree

A. BIOLOGY

FRESHMAN			SOPHOMORE		
English	11, 12		English	21, 22	
Theology	11, 12		Theology	21, 22	
Modern Foreign Language	11, 12		Modern Foreign Language	23, 24	
"	"	"	"	"	"
"	"	"	"	"	"
	13, 14			25, 26	
	15, 16			27, 28	
Mathematics	15, 16		History	25, 26	
Biology	11, 12		Biology	21, 22	
Chemistry	15, 16		Chemistry	25, 26	
JUNIOR			SENIOR		
Philosophy	41, 42		Philosophy	51, 52	
"	43, 44		"	53, 54	
Theology	41, 42		"	55, 56	
			Theology	51, 52	
Biology	51, 52		Biology	61, 62	
"	58				
Physics	45, 46		Chemistry	65, 66	

B. CHEMISTRY

FRESHMAN		SOPHOMORE	
English	11, 12	English	21, 22
Theology	11, 12	Theology	21, 22
†Modern Foreign Language	11, 12	†Modern Foreign Language	23, 24
" " "	13, 14	" " "	27, 28
" " "	15, 16		
Mathematics	11, 12	Mathematics	21, 22
Chemistry	11, 12	History	25, 26
"	13, 14		
Physics	15, 16	Chemistry	21, 22
JUNIOR		SENIOR	
Philosophy	41, 42	Philosophy	51, 52
"	43, 44	"	53, 54
Theology	41, 42	"	55, 56
		Theology	51, 52
Chemistry	51, 52	Chemistry	57, 58
"	56	"	61, 62
Physics	51		

† German is required for those who desire certification by the American Chemical Society.

C. MATHEMATICS

FRESHMAN		SOPHOMORE	
English	11, 12	English	21, 22
Theology	11, 12	Theology	21, 22
Modern Foreign Language	11, 12	Modern Foreign Language	23, 24
" " "	13, 14	" " "	25, 26
" " "	15, 16	" " "	27, 28
Mathematics	11, 12	Mathematics	21, 22
History	11, 12	History	21, 22
Physics	15, 16	Economics	11, 12
JUNIOR		SENIOR	
Philosophy	41, 42	Philosophy	51, 52
"	43, 44	"	53, 54
Theology	41, 42	"	55, 56
		Theology	51, 52
Mathematics	41, 42	Mathematics	51, 52
Mathematics	45, 46	Mathematics	53, 54
		"	55, 56
Elective		Mathematics	65, 66
Mathematics	65, 66		

D. PHYSICS

FRESHMAN				SOPHOMORE			
English			11, 12	English			21, 22
Theology			11, 12	Theology			21, 22
Modern Foreign Language			11, 12	Modern Foreign Language			23, 24
"	"	"	13, 14	"	"	"	25, 26
"	"	"	15, 16	"	"	"	27, 28
Mathematics			11, 12	Mathematics			21, 22
Chemistry			15, 16	History			25, 26
Physics			11, 12	Physics			21, 22
JUNIOR				SENIOR			
Philosophy			41, 42	Philosophy			51, 52
"			43, 44	"			53, 54
Theology			41, 42	"			55, 56
				Theology			51, 52
Mathematics			41, 42	Physics			61, 62
Physics			51, 52	Physics			65, 66
"			55, 56				

E. BUSINESS ADMINISTRATION

I. Accounting

FRESHMAN				SOPHOMORE			
English			11, 12	English			21, 22
Theology			11, 12	Theology			21, 22
Modern Foreign Language			11, 12	Modern Foreign Language			23, 24
"	"	"	13, 14	"	"	"	25, 26
"	"	"	15, 16	"	"	"	27, 28
Mathematics			15, 16	History			25, 26
Economics			11, 12	Economics			21
Economics			15, 16	Economics			31, 32
				Economics			35, 36
JUNIOR				SENIOR			
Philosophy			41, 42	Philosophy			51, 52
"			43, 44	"			53, 54
Theology			41, 42	"			55, 56
				Theology			51, 52
Economics			51, 52	Economics			57, 58
Economics			59	"			63, 64
"			53, 98				
Economics			47, 48	Economics			65, 66
Economics			61, 62	Economics			67

II. Economics

FRESHMAN		SOPHOMORE	
English	11, 12	English	21, 22
Theology	11, 12	Theology	21, 22
Modern Foreign Language	11, 12	Modern Foreign Language	23, 24
" " "	13, 14	" " "	25, 26
" " "	15, 16	" " "	27, 28
Mathematics	15, 16	History	25, 26
Economics	11, 12	Economics	21
Economics	15, 16	Economics	23, 24
		Economics	26
JUNIOR		SENIOR	
Philosophy	41, 42	Philosophy	51, 52
"	43, 44	"	53, 54
Theology	41, 42	"	55, 56
		Theology	51, 52
Economics	51, 52	Economics	55, 56
"	53		
Economics	71, 72	Economics	75, 76
Economics	73	Economics	78

III. Industrial Relations

FRESHMAN		SOPHOMORE	
English	11, 12	English	21, 22
Theology	11, 12	Theology	21, 22
Modern Foreign Language	11, 12	Modern Foreign Language	23, 24
" " "	13, 14	" " "	25, 26
" " "	15, 16	" " "	27, 28
Mathematics	15, 16	History	25, 26
Economics	11, 12	Economics	21
Economics	15, 16	Economics	23, 24
		Economics	25
JUNIOR		SENIOR	
Philosophy	41, 42	Philosophy	51, 52
"	43, 44	"	53, 54
Theology	41, 42	"	55, 56
		Theology	51, 52
Economics	51, 52	Economics	55, 56
"	53		
Economics	81, 82	Economics	85, 86
Economics	93	Economics	78

IV. Marketing

Page 22

FRESHMAN			SOPHOMORE		
English	11, 12		English	21, 22	
Theology	11, 12		Theology	21, 22	
Modern Foreign Language	11, 12		Modern Foreign Language	23, 24	
"	13, 14		"	25, 26	
"	15, 16		"	27, 28	
Mathematics	15, 16		History	25, 26	
Economics	11, 12		Economics	21	
Economics	15, 16		Economics	23, 24	
			Economics	25	
JUNIOR			SENIOR		
Philosophy	41, 42		Philosophy	51, 52	
"	43, 44		"	53, 54	
Theology	41, 42		"	55, 56	
			Theology	51, 52	
Economics	51, 52		Economics	55, 56	
"	53				
Economics	75, 76		Economics	95, 96	
Economics	91		Economics	93	

F. EDUCATION

FRESHMAN			SOPHOMORE		
English	11, 12		English	21, 22	
Theology	11, 12		Theology	21, 22	
Modern Foreign Language	11, 12		Modern Foreign Language	23, 24	
"	13, 14		"	25, 26	
"	15, 16		"	27, 28	
History	11, 12		History	21, 22	
Mathematics	15, 16		Sociology	21, 22	
Education	11, 14		Education	21, 22	
JUNIOR			SENIOR		
Philosophy	41, 42		Philosophy	51, 52	
"	43, 44		"	53, 54	
Theology	41, 42		"	55, 56	
			Theology	51, 52	
Elective Science	41, 42		Education	55	
Education	52, 51		(Alt.) Electives in Field		
Electives in Field			(Alt.) Electives in Field		
			Practice Teaching		

G. ENGLISH

FRESHMAN			SOPHOMORE		
English	11, 12		English	21, 22	
Theology	11, 12		Theology	21, 22	
Modern Foreign Language	11, 12		Modern Foreign Language	23, 24	
"	"	"	"	"	"
"	"	"	"	"	"
	13, 14			25, 26	
	15, 16			27, 28	
History	11, 12		History	21, 22	
Mathematics	15, 16		Survey of English Literature	27, 28	
Sociology	11, 12		Fine Arts	55, 56	
JUNIOR			SENIOR		
Philosophy	41, 42		Philosophy	51, 52	
"	43, 44		"	53, 54	
Theology	41, 42		"	55, 56	
			Theology	51, 52	
Elective Science	41, 42		Electives in Field		
Electives in Field			Electives in Field		
Electives in Field					

H. GENERAL

(Economics, History, Political Science, Sociology)

FRESHMAN			SOPHOMORE		
English	11, 12		English	21, 22	
Theology	11, 12		Theology	21, 22	
Modern Foreign Language	11, 12		Modern Foreign Language	23, 24	
"	"	"	"	"	"
"	"	"	"	"	"
	13, 14			25, 26	
	15, 16			27, 28	
History	11, 12		History	21, 22	
Mathematics	15, 16		Economics	27, 28	
Sociology	11, 12		Political Science	11, 12	
JUNIOR			SENIOR		
Philosophy	41, 42		Philosophy	51, 52	
"	43, 44		"	53, 54	
Theology	41, 42		"	55, 56	
			Theology	51, 52	
Elective Science	41, 42		Electives in Field		
Electives in Field			Electives in Field		
Electives in Field					

To fulfill the science requirement of Junior Year, one of the following may be taken: Biology 41, 42, Chemistry 41, 42, Physics 41, 42 or 43, 44.

Course Numbering

Course numbers were changed on 1 August 1958. Old numbering system will be found in column on left. New numbers will be found in column on right.

ACCOUNTING AND ECONOMICS

FRESHMAN

5.1, 2	11, 12	Principles of Economics
6.1, 2	15, 16	Elementary Accounting

SOPHOMORE

22	21	Economic History of U.S.
8	23	Economic Geography
45	24	Intr. to Indust. Relations
23	25	Applied Economics
66	26	Economic Theory
5.1, 2	27, 28	Principles of Economics
33.1, 2	31, 32	Intermediate Accounting
79.1, 2	35, 36	Business Law (Acctg. Maj.)

JUNIOR AND SENIOR

5.1, 2	41, 42	Principles of Economics
6.1, 2	43, 44	Elementary Accounting
33.1, 2	45, 46	Intermediate Accounting
79.3, 4	47, 48	Business Law (Acctg. Maj.)
45	49	Intro. to Industrial Relations
62	51	Corporation Finance)
43	52	Business Statistics)

41	53	Money and Banking)
78.1, 2	55, 56	Business Law (Non-Acctg. Maj.)
	57	Investments
	58	Public Finance
	59	Advanced Corporation Finance
50.1, 2	61, 62	Cost Accounting
58.1, 2	63, 64	Auditing
59.1, 2	65, 66	Federal Income Tax
60.1, 2	67	Advanced Accounting
64	71	History of Economic Thought
46	72	Modern Economic Theories
47	73	Comparative Economic Systems
80.1, 2	75, 76	Govt. and Economic Life
95	77	Pro-Seminar Economic Order
67	78	Internat. Trade and Finance
56	81	Prin. of Marketing
96	82	Retail Distribution
97	85	Sales Management
99	86	Prin. of Advertising
94	91	Social and Labor Legislation
98	93	Personnel Administration
90.1, 2	95, 96	Collective Bargaining
74	98	Business Management

AIR SCIENCE

FRESHMAN

101, 102 11, 12 Foundations of Air Power I

SOPHOMORE

201, 202 21, 22 Foundations of Air Power II

JUNIOR

301, 302 41, 42 Leadership Prin. and Practices

SENIOR

401, 402 51, 52 Global Relations

BIOLOGY

FRESHMAN

1 11 General Botany

2 12 General Zoology
(Fresh. B.S. Biol.)

SOPHOMORE

61 21 Vertebrate Embryology
(Soph. B.S. Biol.)

41 22 Comparative Anatomy

JUNIOR

43.1, 2 41, 42 General Biology (Jun. Elec.)

44 51 Mammalian Anatomy
(Jun. B.S. Biol.)

Vertebrate Histology
(Jun. B.S. Biol.)

General Zoology
(Jun. A.B. Pre-Med.)

Mammalian Anatomy
(Jun. A.B. Pre-Med.)

Microtechnique
(Jun. B.S. Biol.)

SENIOR

31 61 Genetics

35 62 General Physiology

62 65 Vertebrate Histology
(Sen. A.B. Pre-Med.)

61 66 Vertebrate Embryology
(Sen. A.B. Pre-Med.)

63 67 Microtechnique
(Sen. A.B. Pre-Med.)

CHEMISTRY

FRESHMAN

13.1, 2 11, 12 Gen. Inorganic Chemistry
(Fresh. Chem. Majors)

12 13, 14 Chemical Problems

11.1, 2 15, 16 Gen. Inorganic Chemistry
(Fresh. Science Majors)

SOPHOMORE
21.1, 2 21, 22 Analytical Chemistry

CHEMISTRY (Con't.)

31	Qualitative Analysis	25
32	Quantitative Analysis	26
JUNIOR		
41.1, 2	Gen. Chemistry (Jun. Elec.)	41, 42
33.	Glass Practice	46
61.1, 2	Organic Chemistry (Jun. B.S. Chemistry)	51, 52
51.1	Physical Chemistry I	56
SENIOR		
51.2, 3	Physical Chem. II & III	57, 58
52.1, 2	Advanced Organic Chem.	61, 62
61.1, 2	Organic Chemistry (Sen. Pre-Med. A.B. & B.S.)	65, 66
	Chemistry Seminar	67

**CLASSICS
GREEK**

FRESHMAN AND SOPHOMORE		
1, 2	Elementary Greek	11, 12
	Intermediate Greek	13, 14
5, 6	Advanced Greek	15, 16
17, 18	Intermediate Greek	21, 22
39, 40	Advanced Greek	25, 26
JUNIOR AND SENIOR		
63.1, 2	Homer 'Iliad' and Odyssey'	51, 52

70.1, 2	The Drama of Euripides	55, 56
	The Dialogues of Plato	61, 62
64.1	The 'Poetics' of Aristotle	65
	'Nicomachean Ethics' Arist.	66
73.1, 2	'Histories' of Thucydides	71, 72
65.1, 2	4th Cent. Christian Texts	75, 76

LATIN**FRESHMAN AND SOPHOMORE**

1	Cicero; Virgil; Catullus	11
2	Horace; Livy	12
1-A, 2-A	Intermediate Latin	15, 16
21	Cicero; Tacitus	21
22	Cicero; Horace, Juvenal	22

JUNIOR AND SENIOR

	Latin Lit. Early Middle Ages	51
	Latin Lit. Later Middle Ages	52
63, 64	Medieval Latin Lyrics	55, 56
61, 62	Classic. Infl. on Eng. Lit.	61, 62

EDUCATION

FRESHMAN		
1	History of Education	11
	Curriculum Development	12
32	History of Education in U.S.	14
SOPHOMORE		
	Educational Statistics	21
70	Tests and Measurements	22

EDUCATION (Con't.)

JUNIOR

31	51	Secondary School Methods
64	52	Philosophy of Education

SENIOR

51	55	Educational Psychology
----	----	------------------------

JUNIOR AND SENIOR

71	61	Adolescent Psychology
52	62	Principles of Guidance
	71	Reading in the Secondary Schools
	72	Teaching Observation and Practice

ENGLISH

FRESHMAN AND SOPHOMORE

3.1, 2	11, 12	Poetry and Prose
22.1, 2	21, 22	Rhetoric
	25, 26	Survey of Eng. Lit.

JUNIOR AND SENIOR

80.1	45	Chaucer
	46	Middle English
	51	Eng. Lit. of 16th Cent.
75.1, 2	55, 56	Shakespeare
	57	Tudor and Stuart Drama
	61	Early 17th Cent. Eng. Lit.

39.1	62	Milton
	65	Dryden; Pope, Swift
	66	The Age of Johnson
40	71	Eng. Poetry, 19th Cent.
62	74	Novel in 18th and 19th Cent.
61.1, 2	75, 76	Victorian Literature
63	83	19th Cent. American Lit.
69	84	20th Cent. American Lit.
83	93	Introduction to Criticism
	96	Seminar Bibliogr. and Method
	99	Honors Reading

FINE ARTS

1.1, 2	51, 52	Art Apprec. & History. I & II
2.1, 2	53, 54	Art Apprec. & Hist. III & IV
	55, 56	Survey Art Apprec. & History
3.1, 2	61, 62	Appreciation of Music
4.1, 2	65, 66	Harmony
10.1, 2	71, 72	Studio Painting & Drawing

HISTORY AND POLITICAL SCIENCE

HISTORY

FRESHMAN AND SOPHOMORE

2.1	11	European Hist. to 900
21.2	12	European Hist. 900-1648
22.1	21	European Hist. 1648-1815
22.2	22	European Hist. 1815
3.1, 2	25, 26	Survey West. Civiliz. to 1648 and since 1648

HISTORY (Con't.)

JUNIOR AND SENIOR

3.1, 2	41, 42	Survey West. Civiliz. to 1648 and since 1648
4	43	(Jun. A.B. Pre-Med.) Historical Methodology
15, 16	46, 47	Hist. of U.S. to 1865 and since 1865
17	48	U. S. Hist. in 20th Cent.
66.1, 2	51, 52	Diplomatic Hist. of U.S.
18	55	Economic Hist. of U.S.
51	61	Hist. of Tudor England
52	62	Hist. of Stuart England
62.1, 2	65, 66	Europe in the 19th Cent.
65.1, 2	67, 68	Europe since 1914
67.1, 2	71, 72	Hist. of Latin America
71.1, 2	73, 74	Far East in Modern Times
74.1, 2	77, 78	Hist. of Russia
73	81	Reading Course Hist. & Govt.
72	83	Pro-Seminar in History

POLITICAL SCIENCE

FRESHMAN AND SOPHOMORE

11.1, 2	11, 12	Introduct. Political Science
---------	--------	------------------------------

JUNIOR AND SENIOR

12.1, 2	41, 42	American Government
42.1, 2	45, 46	International Relations
43.1, 2	51, 52	Diplomatic Hist. of U.S.
31	55	Constit. & Leg. Hist. England

21.1, 2	57, 58	Hist. of Political Thought
23	61	American Political Parties
51	62	Public Administration
32.1, 2	65, 66	Constit. Hist. of U.S.
44	68	Inter-American Problems
24	71	The U.S.S.R.
22.1, 2	73, 74	Comparat. Modern Govts.
52.1, 2	75, 76	Govt. & Economic Life
61	83	Pro-Seminar Polit. Science

MATHEMATICS

FRESHMAN

13.1, 2	11, 12	Prin. of Modern Mathematics
17	15	Introductory Analysis
18	16	Elementary Stat. Analysis
2.1, 2	17, 18	Mathematics of Finance

SOPHOMORE

23.1, 2	21, 22	Prin. of Modern Math. III & IV
---------	--------	-----------------------------------

JUNIOR AND SENIOR

41.1, 2	41, 42	Advanced Calculus
55.1, 2	45, 46	Intr. Higher Geom. & Topol.
45.1, 2	51, 52	Intr. Abstract Algebra
65.1, 2	53, 54	Prin. of Analysis & Topol.
63.1, 2	55, 56	Theory of Probability
75.1, 2	61, 62	Special Topics
	65, 66	Mathematical Seminar

MODERN FOREIGN LANGUAGES

FRENCH

FRESHMAN

10.1, 2 11, 12
15.1, 2 13, 14
24.1, 2 15, 16

Elementary French
French Intermediate I
French Intermediate II

SOPHOMORE

15.1, 2 23, 24
24.1, 2 25, 26
32.1, 2 27, 28

French Intermediate I
French Intermediate II
Advanced French

JUNIOR AND SENIOR

65.1, 2 41, 42
45, 46
51

Develop. French Classicism
Age of Enlightenment. in France
Romanticism

52
55, 56
61, 62

Realism
Survey of Theatre in France
French Lit. 1800 to Modern
Times

71, 72
75, 76

French Conversat. & Compos.
Phonetics and Diction

GERMAN

FRESHMAN

10.1, 2 11, 12
15.1, 2 13, 14
24.1, 2 15, 16

Elementary German
German Intermediate I
German Intermediate II

SOPHOMORE

15.1, 2 23, 24
24.1, 2 25, 26
32.1, 2 27, 28

German Intermediate I
German Intermediate II
Advanced German

JUNIOR AND SENIOR

62 41, 42
45, 46
51, 52

German Literary Hist.
Goethe and Romanticism
Realism

71, 72

German Conversat. and
Composition

ITALIAN

FRESHMAN AND SOPHOMORE

11, 12
13, 14

Elementary Italian
Italian Intermediate I

RUSSIAN

FRESHMAN AND SOPHOMORE

11, 12
13, 14

Elementary Russian
Russian Intermediate

SPANISH

FRESHMAN

10.1, 2 11, 12
15.1, 12 13, 14
24.1, 2 15, 16

Elementary Spanish
Spanish Intermediate I
Spanish Intermediate II

SOPHOMORE		
15.1, 2	23, 24	Spanish Intermediate I
24.1, 2	25, 26	Spanish Intermediate II
32.1, 2	27, 28	Advanced Spanish

JUNIOR AND SENIOR		
63.1, 2	41, 42	Survey Spanish Lit. to 1700 and since 1700
	51	Cervantes
	52	Drama of the Golden Age
	61, 62	Survey of Spanish Drama
62.1, 2	71, 72	Spanish Conversat. & Comp.

NAVAL SCIENCE

FRESHMAN		
101	11	Evolution of Sea Power
102	12	Naval Orientation

SOPHOMORE		
201	21	Naval Weapons
202	22	General Psychology
JUNIOR		
301	41	Naval Engineering
302	42	Navigation
301M	45	Evolution of Art of War
302M	46	Mod. Basic Strat. & Tactics

SENIOR		
401	51	Naval Operations

402	52	Naval Administration
401M	55	Amphibious Warfare
402M	56	Leadership; Military Justice

PHILOSOPHY

JUNIOR		
41	21, (41)	Logic
42	22, (42)	Epistemology
43	43	Ontology
44	44	Cosmology

SENIOR		
51	51	Natural Theology
52	52	Fundamental Psychology
53	53	Advanced Psychology
55	55	General Ethics
56	56	Special Ethics
62.1, 2	57, 58	History of Philosophy

PHYSICS

FRESHMAN		
1	11	Mechanics; Heat; Sound
2	12	Electricity; Light (Fresh. Physics Majors)
1	15	Mechanics; Heat; Sound
2	16	Electricity; Light (Fresh. Science Majors)

SOPHOMORE		
21	21	Geometr. & Physical Optics

PHYSICS (Con't.)

45	22	Heat and Thermodynamics
1, 2	25, 26	General Physics (Soph. Nav. ROTC Reg.)
JUNIOR AND SENIOR		
41.1, 2	41, 42	General Physics (Jun. Elec.)
75	43	Introd. Astronomy " "
76	44	Introd. Geology " "
1, 2	45, 46	General Physics (Jun. A.B. Pre-Med.)
43.1	51	Electricity
		Jun. B.S. Physics
		Jun. B.S. Chem.
70.1	52	Atomic Physics I
60	55	Theoretical Mechanics
53	56	Electromagnetic Theory
52	61	Nuclear Physics
54	62	Electronics
43.2	65	Alternating Current Circuits
70.2	66	Atomic Physics II
32	73	Engineering Drawing
33	74	Descriptive Geometry
	75	Physics Seminar

SOCIOLOGY

FRESHMAN AND SOPHOMORE		
31.1, 2	11, 12	Introd. Sociology (Fresh. B.S. English) (Fresh. B.S. General)

31.1, 2	21, 22	Introd. Sociology (Soph. B.S. Education)
---------	--------	---

JUNIOR AND SENIOR

31	41	Introd. Sociology
75.1, 2	51, 52	Social Research
73.1, 2	55, 56	Social Psychology
61	62	Contemp. Sociol. Theories
64	64	Industrial Sociology
65	65	American Minorities
66	66	Marriage and The Family
67	67	Sociology of The City
70	71	Sociology of the U.S.S.R.
62	73	Social Stratification
74	74	Law and Society
60	76	Cultural Anthropology
	77	Social Research

THEOLOGY

FRESHMAN AND SOPHOMORE

10	11	The Life of Christ
11	12	Person, Mission, Church of Christ
20, 21	21, 22	Christ in His Members

JUNIOR AND SENIOR

30	41	Christology; Soteriology
31	42	Fall of Man; Justification
40	51	The Act of Faith
41	52	Christian Churches

Courses of Instruction

DEPARTMENT OF

Accounting and Economics

Professors: Peragallo, (Chairman), R. F. X. Cahill, B. W. McCarthy

Associate Professors: T. J. Cahill, Callaghan, Fenlon, McDermott, R. J. Smith

Instructors: W. C. Crowley, D. A. King, O'Connell, Powers, Saluti, Scola

Economics 11,12 (27,28) **Principles of Economics.**

A study of the basic institution and principles underlying the operation of the economic system. Particular attention is given to the factors of production, the laws of demand, supply and price, the conditions of pure and imperfect competition, monopoly, the laws of distribution, money and banking, interregional trade, government and business, business cycles, labor problems and comparative economic systems.

Six credit hours.

Economics 15, 16 **Elementary Accounting.**

This course embraces a study of the basic accounting principles with emphasis on the techniques of procedure involved in the accounting cycle, as related to the sole proprietorship, partnership and corporate form of business organization. Emphasis is also placed on the preparation and interpretation of the financial records. (No credit is granted unless this course is taken for two semesters.)

Six credit hours.

Economics 21. **Economic History of the United States.**

Economic development from colonial days to the present time including modern European developments that affect the United States; the principal industrial interests such as agriculture, mining, fishing, manufacturing and transportation, money and banking, and the problems of labor, immigration, tariff and world-wide commercial relations.

Three credit hours.

Economics 23. **Economic Geography: World Industries and Resources.**

The purpose of this course is to analyze the regional distribution of world industrial activities. A study is made of the distribution and comparative importance of manufacturing, mining, forestry and agriculture in relation to such factors as power resources, raw materials, climate, land-forms, and centers of population.

Three credit hours.

Economics 24 (49) **Introduction to Industrial Relations.**

The purpose of this course is to survey the entire field of industrial relations including the development of unions, the place of collective bargaining in our present economic structure and the problems of labor as they have evolved out of this economic society. The efforts at the solution of these problems by labor unions, employers and the government will be analyzed. Prerequisite: Eco. 25 or 26.

Three credit hours.

Economics 25. **Applied Economics.**

The chief objective of this course is to strengthen the student's grasp of economic principles and to help him to interpret economic theory to the point where it becomes more definitely workable for the solution of business problems. The student during this course will consider a series of business cases that have a direct bearing upon the economic issues under consideration. Prerequisite: Eco. 11, 12.

Three credit hours.

**Economics 26.
Economic Theory.**

This course builds upon the student's knowledge of the generally accepted principles of economics. It analyzes critically the scope, methodology, nature, significance and limitations of scientific inquiry in the field of economics. The emphasis of the course is upon macro-economic analysis as applied to value and distribution theory and upon micro-economic analysis as necessitated by the national income approach. The postulates, conditions and assumptions of economic analysis under conditions of pure and imperfect competition are examined as well as the changes wrought in economic theory as a result of the development of the aggregate approach. Finally, the course takes some cognizance of the changing relationships between government and business. Prerequisite: Eco. 11, 12.

Three credit hours.

**Economics 31, 32 (45, 46)
Intermediate Accounting.**

This course provides instruction in corporation accounting with special emphasis on the preparation and interpretation of corporate financial statements. A thorough study of the balance sheet is made from the viewpoint of content and proper valuation procedures, with special emphasis on pertinent American Institute of Accounting Bulletins. Statements are analyzed by means of horizontal and vertical analysis and through ratio analysis. Training is also given in the preparation of statements from incomplete data, and in the preparation of the statement of application of funds.

Six credit hours.

**Economics 35, 36.
Business Law.**

Required of all students majoring in Accounting. The course includes contracts, agency, sales and negotiable instruments. The course is intended to correlate the accounting and legal aspects in reference to common business transactions.

Four credit hours.

**Economics 47, 48.
Business Law.**

A continuation of Business Law. Eco. 35, 36. The course includes a study of legal aspects of Partnerships and corporations; personal property, real property, insurance, trade regulations and business torts.

Four credit hours.

**Economics 51.
Corporation Finance.**

A study of the major financial problems involved in the organization, operation, expansion, reorganization, and liquidation of business corporations. Consideration is given to financial ratios, dividend policies, sources of funds, and other topics pertinent to the acquisition of a working knowledge of the significant financial characteristics of business corporations. Prerequisite: Eco. 11, 12.

Three credit hours.

**Economics 52.
Business Statistics.**

An introduction to basic concepts and applications of statistics, with emphasis on a description of frequency distributions (averages, dispersion, etc.), and an introduction to statistical inference, time series, index numbers, and simple correlation. Emphasis is on practical application. The course is not intended for students who take college mathematics through calculus. Prerequisite: Eco. 12 and Math. 16.

**Economics 53.
Money, Credit and Banking.**

The purpose of this course is to introduce the student to the general economic principles governing modern monetary arrangements, credit and banking in the economic organization. In each instance the genetical development is followed. Special emphasis is placed on the Federal Reserve System, its credit control facilities and endeavors. Prerequisite: Eco. 11, 12.

Three credit hours.

**Economics 55, 56.
Business Law I and II.**

This course is intended to give the student some knowledge of the ordinary legal aspects of common business transactions. The course includes contracts, agency, sales, negotiable instruments and other topics of special importance as a law background of business. Required of all seniors in Business Administration except those majoring in Accounting.

Four credit hours.

**Economics 57.
Investments.**

This course is devoted to a study of basic investment concepts; a consideration of classes of securities; investment mechanics and sources of information; and an analysis of industrial, railroad and public utility securities. Prerequisites: Eco. 16, 51.

Two Credit Hours.

**Economics 58.
Public Finance.**

This course covers the basic concepts of governmental expenditure, taxation, debt, budget, fiscal policy, intergovernmental fiscal relations, and foreign public finance systems. The economic consequences of public fiscal policies are emphasized. *Two Credit Hours.*

**Economics 59.
Advanced Corporation Finance.**

This course would comprise the following topics: dividend policy and the retention of corporate earnings; business expansion and combination; mergers and consolidations; holding companies; refinancing and recapitalization; treatment for financial failure; compromises and receiverships; corporate reorganization; dissolution and liquidation of corporations; broad social and economic aspects of corporate finance. *Two Credit Hours.*

**Economics 61, 62.
Cost Accounting.**

An introductory study of basic cost accounting principles, practices, and procedures, with a special emphasis on job order costs, process costs, standard cost, and estimated costs; managerial control through the use of cost accounting data and procedures; and special applications of cost accounting procedures. Prerequisite: Eco. 31, 32.

Six credit hours.

**Economics 63, 64.
Auditing.**

A study of the theory and practice of auditing. The laboratory work covers a test audit of a small manufacturing concern. Prerequisite: Eco. 61, 62.

Six credit hours.

**Economics 65, 66.
Federal Income Tax.**

This course provides instruction in Federal Income Tax Laws and their application to the incomes of individuals, partnerships, corporations, and fiduciaries. Practice in making out reports and returns, and a study of the procedure of handling claims, form the basis of applied instruction. Prerequisite: Eco. 31, 32.

Four credit hours.

**Economics 67.
Advanced Accounting.**

Parent and subsidiary accounting relationships are studied and a critical analysis is

made of the principles and postulates of accounting based upon the study of the Accounting Research Bulletins of the American Institute of Accountants and the Accounting Releases of the Security Exchange Commission. Research topics are assigned and reported upon. The course is organized on a group discussion basis. Prerequisite: Eco. 61, 62.

Three credit hours.

**Economics 71.
History of Economic Thought.**

The aim of this course is to stress critically the development of ideas and theories which now dominate economic science, by viewing these various contributions at their sources. Prerequisite: Eco. 25 or 26.

Three credit hours.

**Economics 72.
Modern Economic Theories.**

This course deals with the ideas and theories which are now current, examining the biographical background of the various authors, the genesis of their contributions, and instituting a critical evaluation of their work. Prerequisite: Eco. 25 or 26.

Three credit hours.

**Economics 73.
Comparative Economic Systems.**

An historical and critical analysis of the various systems of economy is made. The origin, nature, function and economic significance of Communism, Socialism, Nazism, Fascism, Capitalism are explained.

The broad foundations of social philosophy underlying each system are emphasized, as are the variants between theory and practice. The social goals and economic institutions of the various systems are compared. Prerequisite: Economics 25 or 26.

Three credit hours.

**Economics 75, 76.
Government in Economic Life.**

This course presents an investigation of the philosophical basis of government-business relationship together with an historical development of control. It includes also a study of American constitutional tools and the practice of enforced competition, special problems of control relative to trusts, public utilities, transportation, extractive industries, exchanges and labor. Prerequisite: Eco. 11, 12.

Six credit hours.

**Economics 77.
Pro-Seminar in Economic Order.**

Reading and research under direction on a series of economic problems with individual

reports and group discussions.

Three credit hours.

**Economics 78.
International Trade.**

A study of world trade, foreign investments, debtor and creditor nations, theory of free trade and protective tariffs and a discussion of the recent methods in the control of imports, exports, foreign investments, and the special problems arising from the international movement of goods, services, and capital. Prerequisite: Eco. 25 or 26. *Three credit hours.*

**Economics 81.
Principles of Marketing.**

This course covers the meaning and cost of market distribution; development of marketing methods; the consumer movement and factors which affect consumption; income and its distribution; functions of transportation, storage, standardization, and grading; various types of retail and wholesale institutions; their functions, problems, and expenses; channels of distribution; integration; direct marketing; brokers and other agents; organized produce exchanges and speculation; merchandising; analysis of margins, expenses, profits and failures of marketing concerns, buying and stock turnover; and governmental regulations. Prerequisite: Eco. 25, 26. *Three credit hours.*

**Economics 82.
Retail Distribution.**

A survey of the fundamentals of retailing, including elements of retail profit; merchandise policies and merchandise selection; pricing and buying; merchandise control; sales promotion policies; service policies, advertising, display and layout methods; personnel and organization; store system and operation; accounting, credit and finance. This course will also consider general management policies. The case method will be followed based on "Problems in Retailing" by McNair, Gragg, and Teele. Prerequisite: Eco. 81. *Three credit hours.*

**Economics 85.
Sales Management.**

The fundamentals of modern sales techniques; the various steps in a realistic sales presentation; sales presentations evaluated; sales organization structure; selection, train-

ing and supervision of salesmen. Present emphasis in sales management.

Three credit hours.

**Economics 86.
Principles of Advertising.**

A basic course dealing with the function, theory, principles and application of advertising. Special emphasis is placed on copy writing, layout, media research. Students engage in the planning and execution of practice advertising campaigns. Prerequisites: Eco. 85. *Three credit hours.*

**Economics 91.
Social and Labor Legislation.**

A non-technical study of the various Federal statutes affecting industrial relations. Scope: a review of the background of Labor Law, the application of the Sherman Act to labor organizations, the Norris-La Guardia Act, the Railway Labor Act, the National Labor Relations Act, the Labor Management Relations Act, Social Security and Workmen's Compensation. Study by case method is utilized to bring out the content of these statutes and interpretations by courts and administrative agencies. Prerequisite: Eco. 24. *Three credit hours.*

**Economics 93.
Personnel Administration.**

This course attempts to give a more specific knowledge of the field of Personnel Management. It explains the nature and development of the field, the technique of selection and placement, the maintaining of sound personnel relations as reducing turnover, handling transfers, dismissals, etc.; conducting safety programs and instituting employee welfare measures. Prerequisite: Eco. 11, 12 or Eco. 24. *Three credit hours.*

**Economics 95, 96.
Collective Bargaining and Union
Management Negotiations.**

This course presents union-management negotiations which include the protection and determination of bargaining rights in modern industry, the bargaining unit, helps and hindrances to bargaining, the types of shop in union contracts, grievance procedures, means of mediation and arbitration, seniority rules and other factors which occupy the representatives of management and labor when they meet to bargain.

The second semester covers a case study of bargaining contracts as they have worked out in industry under the National Labor Relations Act. It takes into consideration the effects of various laws which have been passed and which affect the bargaining between labor and management. Prerequisite: Eco. 91.

Six credit hours.

Economics 98. Business Management.

An exposition of the operations of a business firm following scientific principles. Emphasis is on the two principal functions of manufacturing, production and selling, with other activities properly related by planning, organizing and controlling. Prerequisite: Eco. 11, 12.

Three Credit Hours.

Courses of Instruction

DEPARTMENT OF

Air Science

Professor: Lieutenant Colonel Bernet (Chairman)
Associate Professor: Major Callaghan, and Major Facy
Instructor: Captain O'Neil, Captain Whelan

The mission of the Air Force Reserve Officers' Training Corps is to select and prepare students, through a permanent program of instruction at civilian educational institutions, to serve as officers in the Regular and Reserve components of the United States Air Force.

The College of the Holy Cross is one of one hundred and seventy-five Colleges and Universities throughout the country which have Air Force ROTC Units.

The program of instruction of the Air Force ROTC at Holy Cross is divided into two courses—the Basic Course, normally completed during the Freshman and Sophomore years and the Advanced Course, normally completed during the Junior and Senior years. During the Basic Course, the Air Force furnishes the AFROTC student with the distinctive Air Force Blue Uniform and necessary text books. While pursuing the Advanced Course, the student is allotted the sum of one hundred dollars for the purchase of uniforms. Text books required are furnished by the Air Force. In addition the AFROTC advanced student is entitled to commutation of subsistence which amounts to approximately twenty-seven dollars per month, and between his Junior and Senior year, he attends a four to six week summer camp, for which he is paid at the rate of seventy-five dollars a month.

Advanced cadets scheduled for pilot training after commissioning will be given a 35 hour flight training course during their Senior year. This course satisfies the flying requirements of the Civil Aeronautics Authority to become eligible for a private pilot's license. This flight instruction program is designed to determine a cadet's aptitude for flying.

Students who meet certain qualifications and who are selected by a board of officers, military and institutional, are granted a deferment from induction into the service under the Selective Service Act, provided they sign a deferment agreement, in which they agree among other things, to serve on active duty for a period of time as prescribed by the Secretary of the Air Force. A student completing the course may earn a total of 24 hours elective credit toward his Bachelor's degree.

ELIGIBILITY REQUIREMENTS

A candidate for enrollment must be a citizen of the United States between the ages of 14 and 23 years at the time of enrollment, be of high moral character and take such physical examinations as may be prescribed by proper authority and/or present a certificate of health from a doctor.

AS 11, 12.

Foundations of Air Power—I.

A general survey of air power designed to provide the student with an understanding of the elements of air power and basic aeronautical science. This course includes: Potentials of Air Power, Air Vehicles and Principles of Flight, Military Instruments of National Security and Professional Opportunities in the United States Air Force. Two lectures. One hour leadership training laboratory.

Four credit hours.

AS 21, 22.

Foundations of Air Power—II.

A more advanced consideration of Air Power as exemplified by the combat operational capabilities of the United States Air Force. This course includes: The Evolution of Aerial Warfare; the Weapons System Development; United States Air Force Operations in both peacetime and wartime, and the future of Air Power. Two lectures. One hour leadership training laboratory.

Four credit hours.

AS 41, 42.

Leadership Principles and Practices.

Introduces Air Force ROTC cadets to principles of leadership as they apply to Air Force problems and tasks. This course includes: The nature of communication; the nature and use of information; the social and psychological determinants of Air Force leadership, and Air Force staff action and procedures. Four lectures. One hour leadership training laboratory.

Eight credit hours.

AS 51, 52.

Global Relations.

A study of global relationships of special concern to the Air Force officer, with special attention to such aspects as weather, navigation, geography and international relations. This course also prepares the cadet for the transition from civilian to military status as a junior officer. Four lectures. One hour leadership training laboratory.

Eight credit hours.

Courses of Instruction

DEPARTMENT OF Biology

Professors: Busam, (Chairman), MacCormack, Malumphy
Associate Professors: Campbell, Crowe
Assistant Professor: Flavin

Biology 11. General Botany.

A general survey of the plant kingdom, beginning with a study of the vegetative organs of flowering plants, treating both gross and minute structures in their various modifications and physiology. Plant cytology receives detailed consideration with studies in cell structure, nuclear and cell division, and the meiotic divisions. This prepares the ground for a complete synoptic series of the various phyla treated immediately next in order. The course concludes with special studies of the reproductive organs of the flowering plant. Two lectures and two (two-hour) laboratory periods. *Four credit hours.*

Biology 12, (55). General Zoology.

A general survey of the animal kingdom introduced by a rapid consideration of the frog to acquaint the student with fundamental notions of structure and physiology. This is followed by a study of the animal cell with its nuclear, cell, and meiotic divisions. Here the laws of heredity are expounded and each evolved with the fruit fly as the specimen of exemplification. The study of the synoptic series of invertebrates is then taken up. Two lectures and two (two-hour) laboratory periods. *Four credit hours.*

Biology 21, (66). Vertebrate Embryology.

A study of the development anatomy of vertebrates from the early history of the gametes to the stage of growth exemplified in the 10 mm. pig. Fertilization, segmentation,

formation of the three germ layers are studied in the ascaris, sea urchin, amphioxus, and frog. A detailed consideration of the chick embryo from the primitive streak through the 72-hour stage then follows; ending with a thorough study of the 10 mm. pig. The course concludes with a consideration of the theoretical aspects, (as arising from modern experimental studies). Two lectures and two (two-hour) laboratory periods. *Four credit hours.*

Biology 22. Comparative Anatomy.

A comparative general study of vertebrate anatomy, development and phylogeny, considering the various systems of organs of the vertebrate body, tracing their evolution through the different classes of vertebrates in terms of basic concepts, principles and methods of comparative zoology. Structure is constantly correlated with function. Laboratory work based upon the systemic study and dissection of representative protochordates, dogfish, skate, turtle or pigeon, and cat or rabbit. Two lectures and two (two-hour) laboratory periods. *Four credit hours.*

Biology 41, 42. General Biology.

This course aims to acquaint the student with the fundamental structure and functions of living things. It begins with a consideration of the Cell Theory and of the cell as the structural and functional unit of plant and animal life. This is followed by a study of selected types of the main groups of plants and animals, culminating with the general anatomy and physiology of the seed plant and the mammal. Special attention is given in the

lectures to the applications of biological knowledge to the human race, particularly in connection with the discussion of such topics as parasitism, infection and immunity, organic evolution and heredity. Two lectures and one (two-hour) laboratory period.

Six credit hours.

**Biology 51, (56).
Mammalian Anatomy.**

This course provides a detailed study of the rabbit, stressing the skeleton and other anatomical features. Two lectures and two (two-hour) laboratory periods.

Four credit hours.

**Biology 52, (65).
Vertebrate Histology.**

This course is a microscopic study of the anatomy of the vertebrates, beginning with a review of the fundamental facts of cellular structure, as treated in Biology 12. Following this is a detailed study of the four normal types of adult tissues: epithelium, connective, muscular, and nervous tissues. The course concludes with an analysis of the various tissue combinations as illustrated in the organs and systems of the vertebrate organism. The necessary correlation between microscopic structure and function is indicated, especially in the latter third of the course. Two lectures and two (two-hour) laboratory periods.

Four credit hours.

**Biology 61.
Genetics.**

A course designed to acquaint the student with the fundamentals of heredity and variation. Among the topics considered are: the history of genetics, the significance of the science, Mendelian inheritance, the chromo-

somes, theory, factor interaction, sex determination, linkage and crossing over, gene and chromosome mutation, population genetics, genetics and evolution, human inheritance, and practical applications of the science. Problems exemplifying principles and experimentation are assigned for drill. Laboratory work consists chiefly of elementary exercises in cytogenetics and breeding experiments with *Drosophila*. Two lectures and two (two-hour) laboratory periods.

Four credit hours.

**Biology 62.
General Physiology.**

This course investigates many of the primary functions of living organisms. The functions studied are the adaptive power; excitation, conduction and contraction; characteristics of heart actions (including the use of electrocardiograph); gastric and pancreatic metabolism; excretion; respiration; blood-pressure; permeability; protoplasmic movements; general biophysical phenomena. The laboratory work consists of basic experiments on these functions in the living animal and plants, involving extensive use of kymographic recording. Two lectures and two (two-hour) laboratory periods.

Four credit hours.

**Biology 67, (58).
Microtechnique.**

This course supplements the course in Vertebrate Histology. It includes the study and practical application of the paraffin, celloidin, and freezing methods of preparing tissues for microscopic examination. A number of the more common and specific stains and staining methods are then considered and applied. A certain number of well prepared slides is required of each student. Two (two-hour) laboratory periods.

Two credit hours.

Courses of Instruction

DEPARTMENT OF Chemistry

Professors: Fiekers (Chairman), Baril, Charest, VanHook
Associate Professors: Marius, Tansey

The Department of Chemistry is approved by the Committee on Professional Training of the American Chemical Society for its curriculum leading to the Bachelor of Science degree.

Chemistry 11. General Inorganic Chemistry I.

A study of the fundamental theories and general laws of chemistry is made. Subatomic and kinetic molecular structure of matter is emphasized. The periodic table of the elements is introduced with sufficient descriptive chemistry to balance theory. Fundamental chemical calculations are practiced and experiments of a quantitative nature are stressed in laboratory. Required of all students majoring in chemistry. Three lectures and two (two hour) laboratory periods. *Four credit hours.*

Chemistry 12. General Inorganic Chemistry II.

This course is a continuation of Chemistry 11. Chemical equilibrium, the chemistry of solutions, ionization, oxidation and reduction are emphasized. For more descriptive matter, the non-metals are first studied and then the remaining metals. Laboratory work is culminated in a brief introduction to qualitative analysis for anions by semi-micro methods. Required of all students majoring in chemistry. Three lectures and two (two-hour) laboratory periods. *Four credit hours.*

Chemistry 13, 14 Chemical Problems.

This course supplements Chemistry 11 and 12 and initiates the beginner in chemistry into the methods of solving problems in the application of chemical principles. Required of students majoring in chemistry. Problems are

assigned. One lecture per week for two semesters, or two lectures per week in the second semester. *Two credit hours.*

Chemistry 15. General Inorganic Chemistry I.

This course, which follows essentially the same syllabus as Chemistry 11, is required for pre-medical students, physics and biology majors. Two lectures and two (two hour) laboratory periods. *Four credit hours.*

Chemistry 16. General Inorganic Chemistry II.

This course, which follows essentially the same syllabus as Chemistry 12, is required for pre-medical students, biology and physics majors. Two lectures and two (two hour) laboratory periods. *Four credit hours.*

Chemistry 21. Analytical Chemistry I.

The laboratory work in this course is largely volumetric in nature and involves exercises in neutralization, precipitation, oxidation and reduction. Certain determinations are checked by gravimetric and other procedures. Lectures develop the theory for this work along with other analytic theory that is common to both quantitative and qualitative analysis. This helps to integrate the course with the qualitative analytic part of the following one into a unified treatment of analytical chemistry. Required of all students majoring in chemistry.

Two lectures and two (three-hour) laboratory periods. Prerequisite: Chem. 12 or 16.

Four credit hours.

**Chemistry 22.
Analytical Chemistry II.**

This course is a continuation of Chemistry 21. Laboratory work in the first half of this course stresses analysis by gravimetric methods, followed by special analyses, such as electrodeposition, the analysis of limestone, pH determinations, the Kjeldahl nitrogen determination and the determination of carbon in steel. Laboratory exercises for the latter half of the course deal with semi-micro qualitative analysis for metallic ions. Required of students majoring in chemistry. Two lectures and two (three-hour) laboratory periods. Prerequisite: Chem. 21.

Four credit hours.

**Chemistry 25.
Qualitative Analysis.—Semi-Micro.**

Lectures deal with the chemistry of analytic reactions and put emphasis on the development and application of the laws of equilibrium and solution. Laboratory work includes analysis for both anions and cations. Required of pre-medical students. Two lectures and two (two-hour) laboratory periods. Prerequisite: Chem. 12 or 16.

Four credit hours.

Chemistry 26. Quantitative Analysis.

In this course the elements of gravimetric and volumetric analysis are taught with emphasis on the latter. Neutralization, pH determination, oxidation and reduction, applications of the solubility product principle and the Kjeldahl determination of nitrogen are included in the laboratory exercises. Required of pre-medical students. Two lectures and two (two-hour) laboratory periods. Prerequisite: Chem. 12 or 16.

Four credit hours.

**Chemistry 41, 42.
General Chemistry.**

This course intends to give students, who are not otherwise preoccupied with science, an insight into the material make-up of the world about them. It ranges from sub-atomic particles through atoms, molecules and the modern "giant molecules" that have been emphasized in plastics, synthetic fabrics and textiles as well as in living tissue. Descriptive matter for this course is chosen from economic substances such as sulfuric acid, petroleum, coal tar, rubber, plastics, foods, vitamins, hormones and steel. The laboratory part is selected from the

traditions of general chemical laboratory instruction at the start of the course; towards its conclusion, however, a survey of chemical methods of analysis, instrumentation, organic and physical chemistry is made. Demonstrations are used; the scientific method is emphasized. Two lecture hours with demonstration and one (two-hour) laboratory period, each semester.

Six credit hours.

**Chemistry 46.
Glass Practice.**

Facilities are available in the chemistry department at all times so that the student may practice glass blowing with only informal instruction from the staff. A more formal optional course is offered in those years when sufficient interest and numbers warrant such a course. This course is advised for students majoring in chemistry and physics. Course enrollment is limited to eight students. Exhibits of glassware from various American manufacturers complement the collection of glassware already on hand. Seminar, lecture or demonstration one hour per week. Laboratory practice, four hours per week. (Not offered 1958-59)

One credit hour.

**Chemistry 51.
Organic Chemistry I.**

This course consists of introductory lectures on the fundamentals of the science with emphasis on structure, isomerism, homology, nomenclature, synthesis, reactions, and other properties of organic compounds in their application to medicine and industry. Aliphatic hydrocarbons and cycloparaffins are studied along with their derivatives such as alkyl halides, alcohols, glycols, glycerols, sulfur compounds, ethers, aldehydes, ketones, acids and their derivatives, fats, oils and waxes. In laboratory synthesis is emphasized for all. Some attention is given, however, with pre-medical majors to reactions in qualitative organic chemical analysis. For this course training in qualitative and quantitative chemical analysis is desirable. Required of chemistry majors. Three lectures and five hours of laboratory. Prerequisite: Chem. 12 or 16.

Four credit hours.

**Chemistry 52.
Organic Chemistry II.**

This course is a continuation of Organic Chemistry I. Organic nitrogen compounds, carbonic acid derivatives, stereoisomerism, the carbohydrates and the special reactions of the carbonyl group in theory and in synthesis are here studied. Coal tar derivatives are given at-

attention for about half of the semester. Alkaloids, hormones and vitamins are treated in detail. In laboratory synthesis is emphasized for all; attention is given to qualitative organic chemical reactions in the case of pre-medical students. Required of chemistry majors. Three lectures and five hours of laboratory. Prerequisite: Chem. 51. *Four credit hours.*

Chemistry 56. Physical Chemistry I.

A study is made of the fundamental principles and methods by which the behavior of matter in its various states and forms is interpreted. A study of gases, liquids and solids, molecular constitution, thermochemistry, thermodynamics and the quantitative laws of solution is undertaken. Laboratory training in this and the two following courses is designed to test the more important physico-chemical laws; to inculcate physico-chemical technique; and to develop the habit of quantitative interpretation of such phenomena. Training in organic chemistry is a desirable prerequisite. Required of all students majoring in chemistry. Three lectures and five hours of laboratory. Prerequisites: Math 21, 22. Physics 11, 12. Chem. 21 or 26. *Four credit hours.*

Chemistry 57. Physical Chemistry II.

This is a continuation of Physical Chemistry I. Homogeneous and heterogeneous equilibria, reaction kinetics, electrical conductance, electromotive force and ionic equilibria are studied. Selected topics from chemical thermodynamics, quantum theory, photochemistry and particle structure are included. Required of all students majoring in chemistry. Training in organic chemistry is a desirable prerequisite. Three lectures and five hours of laboratory. Prerequisite: Chem. 56. *Four credit hours.*

Chemistry 58. Physical Chemistry III.

This course deals with special topics in advanced physical chemistry with emphasis on Colloidal Chemistry. Three lectures and one (two-hour) laboratory period. Required of all chemistry majors. Prerequisites: Chem. 56 and 57. *Four credit hours.*

Chemistry 61.

Advanced Organic Chemistry I.

This course is comprised essentially of semi-micro qualitative organic analysis. The labor-

atory part includes the identification of the following unknown types: solid, liquid, liquid mixture, solid mixture, drug, dye, alkaloid and a commercial product. In preparation for a part of the work in second semester, lectures are also given on semi-micro, ultimate and functional group, quantitative organic analysis. For this course, a reading knowledge of scientific German is highly desirable. Required of all students majoring in chemistry. Two lectures and four hours of laboratory. Prerequisites: Chem. 22 or 25 and 52. *Four credit hours.*

Chemistry 62. Advanced Organic Chemistry II.

This part of the course is essentially comprised of a study of organic mechanism. In laboratory, a number of examples of "name" syntheses are undertaken and an acquaintance with elemental quantitative analysis is established in practice. Required of all students majoring in chemistry. Three lectures and three hours of laboratory. Prerequisites: Chem. 61. *Four credit hours.*

Chemistry 65. Organic Chemistry I.

This course is essentially the same as chemistry 51 but for a shorter laboratory requirement. Required of pre-medical students and biology majors. Three lectures and two (two hour) laboratory periods per week. *Four credit hours.*

Chemistry 66. Organic Chemistry II.

This course is essentially the same as Chemistry 52 but for a shorter laboratory requirement. Required of pre-medical students and biology majors. Three lectures and two (two hour) laboratory periods per week. *Four credit hours.*

Chemistry Seminar.

Once a week junior and senior chemistry majors meet with the staff and graduate students in seminar. A public exposition of the Bachelor thesis is required of all senior students who major in chemistry.

For information on graduate courses in chemistry, refer to page 131.

Courses of Instruction

DEPARTMENT OF

The Classics

Professors: Izzo, (Chairman), Ahearn, Bean, Foran, Marique, Sampey

Associate Professors: Buckley, Kelly, J. McGrady

Instructors: Barry, Mathews, P. McGrady

I. GREEK

Greek 11, 12. Elementary Greek.

Orthography, oral reading and memory of short Greek sentences. Study of grammar with results tested in composition work.
Six credit hours.

Greek 15. Advanced Greek.

Selected readings from the Odyssey of Homer; Plato's Apology with reference to the Crito and Phaedo. Study of Greek epic poetry and of Athenian culture, fifth century B.C.
Three credit hours.

Greek 16. Advanced Greek.

Selected writings of Euripides and Demosthenes. Study of the genesis of Greek drama and of Athenian culture from 405 B.C. to 340 B.C.
Three credit hours.

Greek 21. Intermediate Greek.

Study of Plato's Apology and Selections from Herodotus.
Three credit hours.

Greek 22. Intermediate Greek.

Study of Homer's Iliad and Odyssey and

the relationship of Homer to Greek Civilization.
Three credit hours.

Greek 25. Advanced Greek.

Study of the Oedipus Tyrannus of Sophocles in the original; Oedipus Coloneus and Antigone in translation.
Three credit hours.

Greek 26. Advanced Greek.

A careful reading of the De Corona of Demosthenes, with a study of the political background of the period.
Three credit hours.

The following courses are open only to those honor students approved by the Chairman of the Department, whose proficiency in Greek enables them to do intensive work in this language.

Greek 51, 52. Iliad and Odyssey of Homer.

A reading of the entire Iliad and sections of the Odyssey, with commentary consisting of archeological notes on the Greece and Aegean of Homer's time (Mycenae, Knossos, Troy); history of Homeric criticism up to the nineteenth century. (Not offered 1959-1960).
Six credit hours.

Greek 55, 56.

The Drama of Euripides.

First Term: Alcestis, Andromache, Hecuba, Hippolytus and Medea. Second Term: Orestes, Bacchae, Iphigenia in Tauris, Ion and Electra. Influence of Euripidean drama on future literatures are specially considered. Intensive consideration is given to metrics, stage directions and antiquities and textual criticism. (Not offered 1959-1960). *Six credit hours.*

Greek 61, 62.

Plato, nine dialogues.

The translation and critical appreciation of the text; philosophical and literary criticism. *Six credit hours.*

Greek 65.

Aristotle, Poetics.

A study of Aristotle's theory of fine art. Collateral reading in other significant theorists

in the field, from Plato to modern times.

Three credit hours.

Greek 66.

Aristotle's Nicomachean Ethics.

Translation and interpretation of Aristotle's moral philosophy. Collateral readings: St. Thomas Aquinas' Commentaries on Aristotle; modern commentaries. *Three credit hours.*

Greek 71, 72.

Thucydides, the Histories.

All eight books are to be covered completely and the students are responsible for translation and explanation of the text; historical and critical background; the influence of Thucydides and his qualities as an historian. *Six credit hours.*

II. LATIN

Latin 11. Cicero, Virgil and Catullus.

A study of life and position of Cicero in Roman letters and politics. The reading of the Virgil's Aeneid and selected lyrics of Catullus. *Four credit hours.*

Latin 12.

Horace and Livy.

The reading of selections from Horace, and a study of his philosophy of life and his influence on English literature. The reading of selections from Livy. *Four credit hours.*

Latin 15, 16.

A course for those who have had two years of high school Latin. The first semester is devoted to a review of grammar, composition and the First Catiline of Cicero. The second semester is devoted to a study of Cicero, Virgil, Horace and Catullus. *Eight credit hours.*

Latin 21.

Cicero and Tacitus.

The study of Tacitus as a stylist. A special study of Oratorical Composition and Analysis is made by a thorough study of the principles

of Oratorical Composition as exemplified in Cicero's "Pro Lege Manilia," or "Pro Roscio Amerino" or "Pro Ligario". Prerequisite: Lt. 12. *Three credit hours.*

Latin 22.

Cicero, Horace, Juvenal.

A comparative study of the Latin Satirists, Horace and Juvenal, and their influences on modern literature. A further study of the principles of Oratorical Composition is made by a thorough analysis of Cicero's "Pro Milone." Prerequisite: Lt. 21. *Three credit hours.*

Latin 55.

Medieval Latin Lyrics I.

Reading and criticism of pagan and Christian poets from the second to the eighth century A.D. (Not offered 1959-1960). *Three credit hours.*

Latin 56.

Medieval Latin Lyrics II.

Reading and criticism of secular and religious poetry from the eighth to the thirteenth century A.D. (Not offered 1959-1960). *Three credit hours.*

Latin 61.
Classical Influences Upon English Literature I.

The influences of Roman Drama upon the development of early English Drama. This course will concern itself with the reading, in Latin and English, of Plautus, Terence, and Seneca; it will also consider the early liturgical drama, the Miracle Plays, and Tudor and Elizabethan comedy and tragedy—excluding Shakespeare. *Three credit hours.*

Latin 62.
Classical Influences Upon English Literature II.

The influence of Classical Satirists upon English satire and epigram. This course will consist of readings, in Latin and English, of Juvenal, Persius and their contemporaries; it will then consider the works of the age of Erasmus and Thomas More, and of the age of Johnson, Milton, Dryden, and Pope. *Three credit hours.*

DEPARTMENT OF Education

Assistant Professor: J. J. Ryan (Chairman)
Instructor: Knapp

Education 11. The History of Education.

A study of educational agencies of ancient times and continued through the Middle Ages and the Renaissance; a study of the growth of national systems, of popular education and the trend of education in the United States.
Three credit hours.

Education 14. History of Education in the United States.

A study of the schools of Colonial America. The organization and development of public and private systems of education in the United States to the present day. *Three credit hours.*

Education 21. Educational Statistics.

The course consists of the presentation of the basic statistical concepts needed by teachers for a better understanding of behavior. Collecting, classifying, and interpreting data through the use of measures of central tendency, variability, correlation, standard scores are studied. Graphical presentation of material and formulae applicable to test material are given.
Three credit hours.

Education 22. Tests and Measurements.

An examination of the criteria for the selection, administration, and interpretation of the commonly used texts, along with the basic concepts in statistics for using test data.
Three credit hours.

Education 51. Secondary School Methods.

A brief review of the salient characteristics of the learning process; consideration of

Courses of Instruction

general and specific objectives; direction of habit formation and right conduct; aids to the acquisition and use of knowledge; recognition and treatment of individual differences; measurement of achievement; analysis and interpretation of results. *Three credit hours.*

Education 52. Philosophy of Education.

The laws of education are the laws of life. The future teacher needs a thorough grasp of the dynamic philosophies molding world action. This course evaluates the philosophies guiding American education, discusses the reasons for the curricula offered in American school systems, and attempts to solve the pivotal problems of democratic life as encountered in school programs.
Three credit hours.

Education 55. Educational Psychology.

The course embraces a systematic study of the educable being, his native and acquired tendencies; economy in learning; the process of acquiring ideas and ideals; general intelligence and its measurements; significance of the whole in respect to classroom procedure.
Three credit hours.

Education 61. Adolescent Psychology.

The behavioral study embracing the physical, mental, social, emotional, and moral growth of the adolescent along with the practical application of psychological principles for a better understanding of the student at this age level. Problems, needs and interests of the adolescent as influenced by the contemporary American life upon the adolescent are discussed.
Three credit hours.

Education 62.
Principles of Guidance.

This is a basic course to familiarize students of education with the principles of guidance requisite for a teaching career. It includes an analysis of the academic, physical, psychological and social factors of human nature in relation to self-realization and life in a democratic community. *Three credit hours.*

Education 71.
Reading in the Secondary School.

A survey of the current practices of teaching reading, the place of reading in the secondary level and special emphasis upon organizational skills are the main areas to be studied. An understanding of the discovering, appraisal and application of remedial techniques for the

secondary school student who has a reading problem are discussed. The place of reading skills in a particular field of teaching is intensively discussed. *Three credit hours.*

Education 72.
Teaching Observation and Practice.

An internship course for students who have been approved by the College Authorities as potential teachers in secondary schools. Both observation and practice will take place in a Public School. Lesson planning and execution under the combined supervision of the classroom teacher and the Director of Teacher Training; individual and group conferences on techniques of teaching, classroom management, diagnostic and remedial devices. *Six credit hours.*

DEPARTMENT OF Education

Assistant Professor: J. J. Ryan (Chairman)
Instructor: Knapp

Education 11. The History of Education.

A study of educational agencies of ancient times and continued through the Middle Ages and the Renaissance; a study of the growth of national systems, of popular education and the trend of education in the United States.

Three credit hours.

Education 14. History of Education in the United States.

A study of the schools of Colonial America. The organization and development of public and private systems of education in the United States to the present day.

Three credit hours.

Education 21. Educational Statistics.

The course consists of the presentation of the basic statistical concepts needed by teachers for a better understanding of behavior. Collecting, classifying, and interpreting data through the use of measures of central tendency, variability, correlation, standard scores are studied. Graphical presentation of material and formulae applicable to test material are given.

Three credit hours.

Education 22. Tests and Measurements.

An examination of the criteria for the selection, administration, and interpretation of the commonly used tests, along with the basic concepts in statistics for using test data.

Three credit hours.

Education 51. Secondary School Methods.

A brief review of the salient characteristics of the learning process; consideration of

Courses of Instruction

general and specific objectives; direction of habit formation and right conduct; aids to the acquisition and use of knowledge; recognition and treatment of individual differences; measurement of achievement; analysis and interpretation of results. *Three credit hours.*

Education 52. Philosophy of Education.

The laws of education are the laws of life. The future teacher needs a thorough grasp of the dynamic philosophies molding world action. This course evaluates the philosophies guiding American education, discusses the reasons for the curricula offered in American school systems, and attempts to solve the pivotal problems of democratic life as encountered in school programs.

Three credit hours.

Education 55. Educational Psychology.

The course embraces a systematic study of the educable being, his native and acquired tendencies; economy in learning; the process of acquiring ideas and ideals; general intelligence and its measurements; significance of the whole in respect to classroom procedure.

Three credit hours.

Education 61. Adolescent Psychology.

The behavioral study embracing the physical, mental, social, emotional, and moral growth of the adolescent along with the practical application of psychological principles for a better understanding of the student at this age level. Problems, needs and interests of the adolescent as influenced by the contemporary American life upon the adolescent are discussed.

Three credit hours.

Education 62.
Principles of Guidance.

This is a basic course to familiarize students of education with the principles of guidance requisite for a teaching career. It includes an analysis of the academic, physical, psychological and social factors of human nature in relation to self-realization and life in a democratic community. *Three credit hours.*

Education 71.
Reading in the Secondary School.

A survey of the current practices of teaching reading, the place of reading in the secondary level and special emphasis upon organizational skills are the main areas to be studied. An understanding of the discovering, appraisal and application of remedial techniques for the

secondary school student who has a reading problem are discussed. The place of reading skills in a particular field of teaching is intensively discussed. *Three credit hours.*

Education 72.
Teaching Observation and Practice.

An internship course for students who have been approved by the College Authorities as potential teachers in secondary schools. Both observation and practice will take place in a Public School. Lesson planning and execution under the combined supervision of the classroom teacher and the Director of Teacher Training; individual and group conferences on techniques of teaching, classroom management, diagnostic and remedial devices. *Six credit hours.*

Courses of Instruction

DEPARTMENT OF

English and Fine Arts

Professors: Bean, Connors, Cummings, Drumm, Gallagher, McCann, Mears, T. A. Shanahan

Associate Professors: Lahey, Mirliani

Assistant Professors: E. F. Callahan, Dailey, Edmunds, Grace (Chairman), Madden, Scannell

Instructors: Curley, L. J. McCarthy, P. McGrady, Reardon, Skelly

English 11. Prose and Poetry.

An introduction to the study of literature; its characteristics, qualities and relation to the other fine arts; the elements and divisions of literature; prose and poetry. This course develops with a specific study of poetry, its nature and province; distinctive features of poetry, poetic diction, emotional, imaginative and thought elements of poetry. Frequent practice in composition is required. *Three credit hours.*

English 12. Poetry.

This course is a continuation of English 11 treating of poetic forms; epic, lyric and dramatic poetry and critical appreciation and reading. Frequent practice in composition is had. *Three credit hours.*

English 21. Rhetoric I.

The theory and practice of persuasive expression constitute the basic content of this course. It embraces the precepts and methods of exposition, of constructive argumentation, of refutation, of motivation. Through the study and analysis of prominent speeches, past and present, and through exercises in individual composition these precepts and methods are put into practice. *Three credit hours.*

English 22. Rhetoric II.

This course is a continuation of English 21. It consists in a more detailed analytic

and stylistic study of rhetorical masterpieces in English and American cultural history. It continues the practice of composition and of oral expression. *Three credit hours.*

English 25, 26. A Survey of English Literature.

The Anglo-Saxon period; Chaucer; the Renaissance; the age of Milton; the Classical period; the Romantic period; the Victorian era. *Six credit hours.*

English 45. Chaucer.

Reading and critical discussion of the complete text of *The Canterbury Tales*. *Three credit hours.*

English 46. Introduction to Middle English.

An introduction to the language and literature of mediaeval England by a careful study of selected texts, with special attention to the Gawainpoet and Langland. *Three credit hours.*

English 51. English Literature of the Sixteenth Century I.

A study of the non-dramatic poetry and prose of the sixteenth century; emphasis on More, Skelton, Spencer, and Sydney. *Three credit hours.*

English 55, 56. Shakespeare.

A careful study of the principal plays with special emphasis on Shakespeare's develop-

ment as a dramatist. Analysis and study of the outstanding characters and a consideration of the historical and theatrical background of the plays. Lectures, reading and written papers. *Six credit hours.*

English 57.
Tudor and Stuart Drama.

A study of selected plays from the early Tudor period to the closing of the theatres in 1642. *Three credit hours.*

English 61.
English Literature (excluding drama) of the first half of the Seventeenth Century.

This course, which stresses metaphysical poetry, acquaints the student with representative selections from the following authors: Bacon, Donne, Burton, Hobbes, Herrick, Herbert, Walton, Carew, Browne, Waller, Suckling, Crashaw, Lovelace, Cowley, Marvell and Vaughan. *Three credit hours.*

English 62.
Milton's Poetry and Selected Prose.

This course proceeds from a study of Milton's early poems to the reading of *Paradise Lost*, *Paradise Regained* and *Samson Agonistes*. Certain prose pamphlets are read either in their entirety or in selections. *Three credit hours.*

English 65.
Dryden, Swift and Pope.

While emphasizing the work of Dryden, Swift and Pope, this course (which omits the novel) also includes selections from Samuel Butler, Pepys, Rochester, Prior, Defoe, Steele, Addison, Shaftebury, Mandeville, Gay, Thomson, Young, Blair and Shenstone. *Three credit hours.*

English 66.
Johnson and the later Eighteenth Century.

This course (which omits the novel) acquaints the student with Collins, Gray, Boswell, Johnson, Christopher Smart, Macpher-

son, Churchill, Walpole, Goldsmith, Sheridan, Beattie, Chatterton, Cowper, Burns, Crabbe, Burke, Paine and Blake. *Three credit hours.*

English 71.
Poetry of the Nineteenth Century, 1798-1832.

The general characteristics of the romantic movement. Wordsworth, Coleridge, Byron, Shelly, Keats. *Three credit hours.*

English 74.
The English Novel in the Eighteenth and Nineteenth Century.

A survey of the novel from Richardson and Fielding to the end of the nineteenth century. *Three credit hours.*

English 75, 76.
Victorian Literature (excepting the novel).

Tennyson, Browning, Elizabeth Barrett Browning, Arnold. The prose of Carlyle, Macaulay, Newman, Arnold, Ruskin, Pater. The Pre-Raphaelite Group: D. G. Rossetti, Christina Rossetti, Morris Swinburne. The poetry of Fitzgerald, Clough, Patmore, James Thompson, Francis Thompson. *Six credit hours.*

English 83.
American Literature in the Nineteenth Century.

Emerson, Thoreau, Hawthorne, Melville, Mark Twain, Howells, Henry Adams, William James, and Stephen Crane are considered in this course. *Three credit hours.*

English 84.
American Literature since 1900.

A survey of representative examples of American writing, chiefly prose, of the twentieth century. *Three credit hours.*

English 93.
Introduction to Criticism.

An introduction to the major critical texts with emphasis on the more recent English and American critics. *Three credit hours.*

COURSES IN FINE ARTS

Fine Arts 51.
Art Appreciation and History I.

The art of Egypt, the Tigris—Euphrates Valley and Crete. Sculpture and architecture of Greece and Rome. Byzantine and Romanesque art. The Middle Ages. Monastic contributions. Gothic art and architecture. *Three credit hours.*

Fine Arts 52.
Art Appreciation and History II.

Flemish painting. Dutch Masters. Italian early and high Renaissance. Baroque period. The Renaissance in France, England, Germany and Spain. *Three credit hours.*

Fine Arts 53.
Art Appreciation and History III.

French painting from the Revolution to 1880. Nineteenth Century art and architecture in England, Germany and the United States.
Three credit hours.

Fine Arts 54.
Art Appreciation and History IV.

Modern French art. The Refuses. Impressionism. The Fauves. Modern schools and experiments. Modern American painting and architecture.
Three credit hours.

Fine Arts 61, 62 Appreciation of Music.

A general cultural course, in lecture form, tracing the development of music from early civilization to modern times, studied through history and analysis. This course is designed specifically to give the lay-musician and music-lover a cultural background with which to enjoy, understand and appreciate music in its many forms and phases. *Six credit hours.*

Fine Arts 65, 66.
Harmony.

An introduction to harmony; a study in the construction and uses of chords; elementary composition and a background for instrumen-

tation and arranging; a cultural course to aid in the harmonic analysis of music.
Six credit hours.

Fine Arts 71.
Studio Painting and Drawing Course.

An art workshop for individual creative expression with emphasis on the techniques of pictorial organization. Fundamental principles of perspective, light and shade, line, form and color, applied to drawing and painting projects from still-life, landscape, and imagination. Exploration of basic techniques including pencil, pen and ink, charcoal, pastel, water color, gouache, and oil. *Three credit hours.*

Fine Arts 72.
Studio Painting and Drawing Course.

Continues the development of creative expression and sound craftsmanship in the basic techniques. Drawing and painting projects from still-life and landscape with special emphasis on portrait and figure drawing. Stresses the design and compositional elements in pictorial organization. *Three credit hours.*

Previous art training and experience are not a requirement for Fine Arts 71, 72. A genuine art interest and a desire to develop one's creative art abilities are the only requisites.

Courses of Instruction

DEPARTMENT OF

History and Political Science

Professors: G. A. Higgins (Chairman), Corcoran, Grattan, G. A. King, Lucey

Associate Professors: Kinsella, McKenna, McNally, Reidy

Assistant Professor: Glavin

Only the basic courses for majors in History and Political Science are listed below as required. Some of the upper division courses are also required, depending on the student's interest in the field of History and Political Science. Hence, all students majoring in History or Political Science must consult with the Chairman of the Department before the final selection of their electives and they must have his approval for the courses selected. The required courses for B.A. students electing to major in History or Political Science are somewhat different from those indicated below. These students should consult with the Chairman of the Department for their required courses.

HISTORY COURSES

History 11.

European History from Christian Antiquity to 900.

Required of Freshmen majoring in Arts (non-pre-medical), Education, History and the Social Sciences. *Three credit hours.*

History 12.

European History from 900 to 1648.

Required of Freshmen majoring in Arts (non-pre-medical), Education, History and the Social Sciences. *Three credit hours.*

History 21.

The Political and Cultural History of Europe: 1648-1815.

Required of Sophomores majoring in Arts (non-pre-medical), Education, History and Social Sciences. *Three credit hours.*

History 22.

The Political and Cultural History of Europe Since 1815.

Required of Sophomores majoring in Arts

(non-pre-medical), Education, History and Social Sciences. *Three credit hours.*

History 25.

A survey of Western Civilization from Christian Antiquity to 1648.

Required of students majoring in Arts (pre-medical), Business Administration, Biology, Chemistry, Mathematics and Physics. *Three credit hours.*

History 26.

A survey of Western Civilization Since 1648.

Required of students majoring in Arts (pre-medical), Business Administration, Biology, Chemistry, Mathematics and Physics. *Three credit hours.*

History 43.

Historical Methodology.

The science of history and its relation to the social sciences; method of historical research and criticism; historians and historical

Tue Wed Fri
5 3 3

writings. Required of all students majoring in History. *Three credit hours.*

History 46.

The History of the United States from the Colonial Period to 1865.

A study of the political, social, economic and cultural history of the United States from the colonial period to the end of the Civil War. Lectures, assigned readings, reports, term paper. Required of all students majoring in History. *Three credit hours.*

History 47.

The United States Since the Civil War.

A study of the political, social, economic and cultural history of the United States since the Civil War. Lectures, assigned readings, reports, term paper. Required of all students majoring in History. *Three credit hours.*

History 48.

The United States in the Twentieth Century.

Some of the salient political, social, economic and religious problems and trends of the United States are selected for investigation and appraisal. *Three credit hours.*

History 51, 52.

Diplomatic History of the United States.

A study of the foreign relations and policies of the United States; the history of our relations with Europe, Latin America and Canada, and the Far East. Required of all students majoring in history. *Six credit hours.*

History 55.

Economic History of the United States.

This course is offered by the Department of Economics as listed under Economics 21. *Three credit hours.*

History 61.

Tudor England: 1485-1603.

A one semester upper division course. Weekly discussion on reading assignments. *Three credit hours.*

History 62.

Stuart England: 1603-1715.

A one semester upper division course. Weekly discussion on reading assignments. *Three credit hours.*

History 65, 66.

Europe in the Nineteenth Century.

Napoleonic Era; Congress of Vienna; Political and Social Revolutions; Unification of Germany and Italy; Russia; the British Empire; Social Theories. *Six credit hours.*

History 67, 68.

Europe since 1914.

The causes of World War I; the Versailles Treaty; the League of Nations; Russia and Bolshevism; Nazism; Fascism; the Far Eastern Situation; the Spanish War of 1936; World War II. *Six credit hours.*

History 71, 72.

History of Latin America.

A study of colonial and national histories of Latin American Republics. *Six credit hours.*

History 73, 74.

The Far East in Modern Times.

A survey of the leading political, social and economic history and modern trends of the Far East: China, Japan, Philippine Islands, India, Pakistan, Burma, Indo-China, Malaya and Indonesia. The emphasis is on China and Japan. *Six credit hours.*

History 77, 78.

History of Russia.

A study of the economic, social, religious, political and cultural history of the Russian people from the period of ancient Kiev to the present. *Six Credit hours.*

History 81.

Reading Course in History and Government.

Reading of a selected list of documentary and authoritative works under direction with individual reports and discussion. Students enrolled in this course must receive approval of the Department. *Three credit hours.*

History 83.

Pro-Seminar in History.

Research with individual reports and class discussion on the subject of the senior thesis or any selected topic. Students enrolled in this course must receive approval of the Department. *Three credit hours.*

POLITICAL SCIENCE COURSES

Political Science 11, 12.

An Introductory Course in Political Science.

A study of the nature and functions of the State; types of government; development and essentials of representative government; constitutional government; problems of administration. Required for a major in political science. *Six credit hours.*

Political Science 41, 42.

American Government.

An examination of the origin of the federal republic and the content of the Constitution of the United States; national, state and municipal government; modern problems. Required for a major in political science. *Six credit hours.*

Political Science 45, 46.

International Relations.

A study of the basic factors in international relations; the multi-state system; power factors; geography, population, natural resources; economic development and system; political system; foreign policy; diplomacy; atomic problems; international organizations; the United Nations, achievements and problems; World Government. *Six credit hours.*

Political Science 51, 52.

Diplomatic History of the United States.

A description of this course will be found under History 51, 52. *Six credit hours.*

Political Science 55.

Constitutional and Legal History of England.

Origin and development of the parliamentary system and the common law. *Three credit hours.*

Political Science 57, 58.

History of Political Thought.

An examination of the political ideas and theories of the pre-Christian writers, the early Christian era, of the scholastics, moderns and contemporaries. *Six credit hours.*

Political Science 61

American Political Parties.

The function of political parties and the history of political parties in the United States. *Three credit hours.*

Political Science 62.

Public Administration.

A study of the theory, organization and problems of public administration. *Three credit hours.*

Political Science 65, 66.

Constitutional History of the United States.

An examination of the origin and content of the Constitution, of the nature of the federal republic and the presidential system, of the development of the Constitution and of current constitutional problems. Prerequisite: PS 41, 42. *Six credit hours.*

Political Science 71.

The U.S.S.R.

A study of Soviet Russia offered by the Department of Sociology in the course listed under Sociology 71. *Three credit hours.*

Political Science 73, 74.

Comparative Modern Governments.

A study and comparison of modern governments. (Not offered 1958-59). *Six credit hours.*

Political Science 75, 76.

Government in Economic Life.

A study of the philosophical basis and salient problems of government business relationship. This course is offered by the Department of Economics under Economics 75, 76. *Six credit hours.*

Political Science 83.

Pro-Seminar in Political Science.

Research with individual reports and class discussion on the subject of the senior thesis or any selected topic. Students enrolled in this course must receive approval of the Department. *Three credit hours.*

Courses of Instruction

DEPARTMENT OF

Mathematics

Professors: Nestor, McBrien

Associate Professor: Swords (Chairman)

Assistant Professors: Hartnett, J. R. McCarthy, P. Shanahan

The program in mathematics is based upon a belief that the best possible mathematical preparation for a student in any field is achieved by introducing him to those modern structural concepts which have in this century so brilliantly illuminated the basic unity of mathematics. This emphasis upon concepts as opposed to techniques invariably invokes the interest of the sincere student and quickly brings him to the frontier of mathematics.

Seminars and individual discussion are an integral part of the program which has as one of its basic aims the development of the spirit of inquiry in the student. The Department has a fine library containing a selection of classical and modern books, monographs and journals, which are available to the student.

Mathematics, 11, 12.

Principles of Modern Mathematics I, II.

This two-semester course forms the first half of a two year study of modern mathematics. Its purposes are to give the student a solid foundation for the second half of the sequence and for subsequent upper division courses, to give him a clear insight into those aspects of mathematics that are already familiar to him, and to give him a feeling for the rigor and beauty of mathematics. Throughout the course, the emphasis is placed on a modern viewpoint of both old and new concepts, rather than on computation and technique.

Six credit hours.

Mathematics 15.

Modern Introductory Analyses.

An elementary introduction to analysis for students majoring in the biological and social sciences, and business administration. Topics covered include fundamental notions on sets and the number system, Cartesian products and the real plane, subsets of the plane, func-

tions, neighborhood topology of the real line, limits and continuity, the derivative function and the definite integral, application to the biological and social sciences.

Three credit hours.

Mathematics 16.

Introduction to Finite Mathematics.

An introduction to finite mathematics for students majoring in the biological and social sciences and business administration. Topics covered include logical relations and truth tables, probability measure, the binomial distribution and normal law, Markov chains, vectors and matrices, linear programming, applications to the biological and social sciences.

Three credit hours.

Mathematics 17.

Mathematics of Finance I.

A review of the essentials of algebra followed by a detailed treatment of interest. (Not given 1959-60).

Three credit hours.

Mathematics 18.
Mathematics of Finance II.

A continuation of Mathematics 17, treating of bonds, annuities, depreciation and capitalization. (Not given 1959-60).

Three credit hours.

Mathematics 21, 22.
Principles of Modern Mathematics III, IV.

The purpose of this course, a continuation of Mathematics 11, 12, is to extend the ideas developed in the Freshman year in such a way that

1. those students who will complete their formal mathematical education with the end of this course will have a well-rounded background in the nature and development of mathematics up to the present time,
2. those students who plan to take further studies in pure or applied mathematics will have a solid foundation for advanced work.

Six credit hours.

Mathematics 41, 42.
Advanced Calculus I, II.

The purpose of this course is to introduce the student to analysis in general and especially to the study of continuous transformations, vector analysis, and complex variables. While the subject matter is classical, the approach at all times is modern. Prerequisite: Math. 11, 12, 21, 22.

Six credit hours.

Mathematics 45.
Introduction to Higher Geometry and Topology I.

Elementary Combinatorial Topology. Topological classification of surfaces. Continuous vector fields and mappings. Three-dimensional manifolds. Networks and complexes. Homotopy and Homology Groups.

Three credit hours.

Mathematics 46.
Introduction to Higher Geometry and Topology II.

A continuation of Mathematics 45. Synthetic and algebraic study of projective space of n dimensions. Homogeneous coordinates,

collineations and correlations. Special emphasis on the role of the commutative ground field.

Three credit hours.

Mathematics 51.
Introduction to Abstract Algebra I.

An introduction to modern algebra and the abstract method. The integers, rational numbers and fields, polynomial forms, complex numbers, basic theory of groups and n -dimensional vector spaces.

Three credit hours.

Mathematics 52.
Introduction to Abstract Algebra II

A continuation of Mathematics 51. The algebra of matrices, linear groups, determinants, rings and ideals, algebraic number fields.

Three credit hours.

Mathematics 53, 54.
Principles of Analysis and Topology I, II.

This course is intended to give a mathematics major a fine grasp of the concepts and techniques of general topology and to give him an introduction to measure theory and theories of abstract integration. The concepts developed in the course are of fundamental importance and furnish all necessary background for the study of Analysis. Prerequisite: Math. 11, 12, 21, 22.

Six credit hours.

Mathematics 55.
Theory of Probability I.

In this course the emphasis is placed on the mathematical foundations of probability. Applications to statistics and other fields are given throughout the development. Topics covered include sample spaces, some combinatorial analysis, the relation of probability to Boolean algebra and measure theory, the binomial and Poisson distributions, and the normal approximation.

Three credit hours.

Mathematics 56.
Theory of Probability II.

A continuation of Mathematics 55. The central limit theorem, law of large numbers, random walk problems, and Markov chains. Special topics, not part of probability theory, are included in this term. These include some elementary calculus of finite differences and fundamental concepts in the theory of games.

Three credit hours.

Mathematics 61, 62.
Special Topics I, II.

Special topics involving extensive reading in mathematical literature. The subject matter may vary to suit the requirements of the student. This course is intended for students who will have completed, with high honors, four complete upper division courses in mathematics.

Six credit hours.

Mathematics 65, 66.
Seminar in Algebraic Geometry

The purpose of this seminar is (1) to provide an introduction to the methods of abstract algebraic geometry by the use of some elementary ideas of modern algebra applied to such simple algebraic varieties as plane curves, and (2) to provide upper classmen with the opportunity of informal mathematical discussion with Faculty members.

Courses of Instruction

DEPARTMENT OF

Modern Languages

Professors: Boursy, Bowen, L. FitzGerald, Flynn, Leavey

Associate Professors: McNerney, Noble

Assistant Professors: Deseautels (Chairman), Silvestrini

Instructors: Baker, deEgaña, J. Flynn, Horwath, Riley

I. FRENCH

French 11, 12.

Elementary French.

This course aims to equip the students with a succinct and useful knowledge of the essentials of French grammar, giving him the ability both to write, read and speak simple idiomatic French, with daily drill in phonetics.

Six credit hours.

French 13, 14 (23, 24).

Intermediate French I.

A thorough review of French grammar is made through reading, composition, oral and aural practice. The required reading aims at an intensive study of selected Short Stories. Prerequisite: Fr. 11, 12 or two years study in an accredited high school or satisfactory grade in placement examination. *Six credit hours.*

French 15, 16 (25, 26).

Intermediate French II.

In this course advanced composition and conversation give the student the opportunity to apply and to perfect this grammatical knowledge. The reading matter forms a survey of French civilization from its origins across the Middle Ages and the Renaissance through the 17th century. The course is given in French. Prerequisite: Fr. 13, 14 or three years of French in an accredited high school

or satisfactory grade in placement examination.

Six credit hours.

French 27, 28.

Advanced French.

During the first semester more emphasis is given to composition than to conversation while acquainting the student with the social, philosophical and literary ideas of the 18th century. The second semester's work places greater emphasis on conversation while examining the poetry, novels, drama and ideas of the 19th century. The course is given in French. Prerequisite: Fr. 15, 16.

Six credit hours.

French 41, 42.

Development of French Classicism.

A study of the masters of the 17th century.

Six credit hours.

French 45, 46.

Age of Enlightenment in France.

A study of the works of Bayle, Fontenelle, Montesquieu, Voltaire, Rousseau and Diderot.

Six credit hours.

French 51, 52.

Romanticism and Realism.

A study of the works of Chateaubriand, Lamartine, Musset, de Vigny, Hugo, Balzac, Stendhal, Flaubert.

Six credit hours.

French 55, 56.
Survey of Theatre in France.

A study of the leading French dramatists, Corneille, Racine, Moliere, Beaumarchais, Hugo, etc.

Six credit hours.

French 61, 62.
French Literature: 1800 to Modern Times.

Six credit hours.

French 71, 72.
French Conversation and Composition

Six credit hours.

French 75, 76.
Phonetics and Diction.

Six credit hours.

II. GERMAN

German 11, 12.
Elementary German.

First Semester. A thorough study of inflections and of essential elementary syntax; drill in easy German composition and the acquisition of a small fundamental vocabulary.

Second Semester. Rapid intensive review of inflections; thorough study of all fundamentals of syntax; practice in writing sentences and in oral composition to make clear the principles of inflection and construction, and familiarize the student with their use; thorough and rapid reading and translation of German texts with particular attention to recognition of the vocabulary.

Six credit hours.

German 13, 14 (23,24).
Intermediate German I.

First semester. Rapid and thorough review of all essentials of grammar; drill in German composition; special study of the more difficult points of syntax; thorough and rapid reading and translation of German texts with special attention to the grammar and constructions involved.

Second semester. Thorough and rapid reading and translation of German prose and poetry; translation from English into German; a study of the fundamentals of the formation, derivation, and composition of German words to the end of acquiring a sufficient vocabulary for sight reading and advanced study. Prerequisite: Gn. 11, 12 or two years of German in an accredited high school or satisfactory grade in placement examination.

Six credit hours.

German 15, 16 (25, 26).
Intermediate German II.

Reading and study of both prose and poetry of the various literary movements; outside reading assignments; special attention is given to developing a large reading vocabulary and rapid and easy reading of more difficult German. The course is largely conducted in Ger-

man. Prerequisite: Gn. 13, 14 or three years of German in an accredited high school or satisfactory grade in placement examination.

Six credit hours.

German 27, 28.
Advanced German.

Conducted entirely in German, this course is completely practical and presupposes a collateral knowledge of German grammar and vocabulary. The continuous writing of compositions in German is important and constitutes the preparatory part of the course, while the class periods fulfill in part the auditory and oral drill requirements. The ability of the student to understand, speak and write German reasonably well will be tested both orally and in writing by the members of the German Department at the termination of each semester. Prerequisite: Gn. 15, 16.

Six credit hours.

German 41, 42.
German Literary History.

This is a background course and presents a general connected survey of the development of German culture and literature from its beginnings to today. For its earlier periods particularly, it is accompanied by selected illustrative readings in modern German translations. Prerequisite: German 25, 26.

Six credit hours.

German 45, 46.
Goethe and Romanticism.

Six credit hours.

German 51, 52.
Realism.

Six credit hours.

German 71, 72.
German Conversation and Composition.

Six credit hours.

III. ITALIAN

Italian 11, 12. Elementary Italian.

This course aims to equip the student with a succinct and useful knowledge of the essentials of the Italian grammar, giving him the ability to read, write and speak idiomatic Italian, with daily drill in phonetics.

Six credit hours.

Italian 13, 14 (23, 24). Intermediate Italian

A thorough review of Italian grammar is made through reading, composition, oral and aural practice.

Six credit hours.

IV. RUSSIAN

Russian 11, 12. Elementary Russian.

A thorough study of the essentials of Russian.

Six credit hours.

Russian 13, 14 (23, 24). Intermediate Russian.

Rapid review of the essentials of the grammar, with study of the more difficult points of syntax.

Six credit hours.

V. SPANISH

Spanish 11, 12. Elementary Spanish.

Exercises in the rudiments of grammar and pronunciation, writing of simple English sentences into Spanish, drill in dictation of words and sentences, memory of common expressions of conversation, translation of selections from classical authors into idiomatic English.

Six credit hours.

Spanish 13, 14 (23, 24). Intermediate Spanish I.

Review of the grammar, writing of English prose into Spanish, dictation of prose and poetry, practice in original composition in Spanish; literary criticisms of the authors read. Prerequisite: Sp. 11, 12 or two years of Spanish in an accredited high school or satisfactory grade in placement examination.

Six credit hours.

Spanish 15, 16 (25, 26). Intermediate Spanish II.

The purpose of this course is to acquire a solid knowledge of idiomatic Spanish by the reading and imitation of Spanish authors. Precise writing is emphasized. Spanish is the language of the class. Prerequisite: Sp. 13, 14 or three years of Spanish in an accredited high

school or satisfactory grade in placement examination.

Six credit hours.

Spanish 27, 28. Advanced Spanish

Emphasis is given to composition rather than to conversation, while acquainting the student with the social, philosophical, and literary ideas of the 18th century.

Six credit hours.

Spanish 41, 42. Survey of Spanish Literature to 1700.

Six credit hours.

Spanish 51, 52. Cervantes and the Drama of the Golden Age.

Six credit hours.

Spanish 61, 62. Survey of Spanish Drama.

Six credit hours.

Spanish 71, 72. Conversation and Composition.

Six credit hours.

LANGUAGE LABORATORY

In addition to their regular class work, students of Modern Languages on the elementary, intermediate and advanced levels are expected to spend one hour a week in the language laboratory.

Courses of Instruction

DEPARTMENT OF

Naval Science

Professor: Captain Will

Associate Professor: Commander Bracken

Instructors: Lieutenant Commander Reilly, Major Kelly, Lieutenant Steckbeck,
Lieutenant Havel, Lieutenant (jg) Prater

GENERAL STATEMENT

The purpose of the Naval Reserve Officers Training Corps is to provide a steady supply of well-educated junior officers for the Navy and Marine Corps, and to build up a reserve of trained officers who will be ready to serve the country at a moment's notice in a national emergency. Students enrolled in the NROTC are of two categories—Regular and Contract. All procedures, benefits and requirements described hereinafter apply to both categories of NROTC students unless specifically indicated as pertaining to only one of the two types.

COLLEGE STATUS

The Naval ROTC Unit is a recognized department of instruction within the College (Department of Naval Science). Full credit toward degrees is granted Naval Science courses.

MILITARY STATUS

NROTC students wear the uniform only on such occasions as prescribed by the Professor of Naval Science. Normally, this will be at drills, ceremonies, and on cruises. In addition to the ordinary requirements of gentlemanly conduct, they are subject to naval discipline and must conduct themselves at all times in a military manner when under naval jurisdiction, that is, when attending naval science classes, drills and exercises, and during summer training periods.

With the exception of the above described instances, NROTC students are in the same category as other students of the College.

STATUS ON GRADUATION

Contract students: After completion of their academic requirements for a baccalaureate degree and the four years of Naval requirements, which include the

summer training, contract students are commissioned as ensigns in the U.S. Naval Reserve or second lieutenants in the U.S. Marine Corps Reserve. They are eligible for call to active duty as indicated below under "Draft Deferment".

Regular students: Upon graduation, regular students are commissioned as ensigns in the U.S. Navy or second lieutenants in the U.S. Marine Corps. They are normally required to serve on active duty for a period of four years. During this period they may request to remain on active duty as career officers. If they do not so request, or if not selected, they are released to the appropriate status in the Reserve.

SUMMER TRAINING

Regular students: All regular students are required to take two summer cruises and one summer period of aviation-amphibious indoctrination, usually of eight weeks' duration each. The cruises are made on board modern warships. The aviation indoctrination is usually conducted at Corpus Christi, Texas, and the amphibious indoctrination is usually conducted at Little Creek, Virginia.

Contract students: Contract students are required to take only one summer cruise during the summer between their junior and senior years, the cruise being of approximately six weeks' duration.

Travel expenses for both regular and contract students from the College to the summer training site and return are furnished by the government. In addition, all students receive active duty pay during summer training amounting to approximately \$75.00 per month.

EMOLUMENTS

Regular students: For regular students the cost of tuition, fees, and textbooks is paid by the government. Necessary uniforms are provided and students receive retainer pay at the rate of \$600 per year.

Contract students: Contract students receive no emoluments during the first two years in the program. During the last two years they receive a subsistence allowance which amounts to approximately \$27.00 a month. They are issued the necessary uniforms and Naval Science textbooks at no expense.

ELIGIBILITY REQUIREMENTS

The College of the Holy Cross is one of fifty-three Colleges and Universities in the country which have Naval ROTC Units.

A candidate for the NROTC must:

1. Be a male citizen of the United States.
2. At the time of his enrollment, if a minor, have the consent of his parent or guardian.

3. Be not less than seventeen nor more than twenty-one years of age on July 1 of the year in which he enters the program. (Contract students may be enrolled if sixteen years of age on July 1 of the year in which he enters the program.)

4. Gain his own admittance to the College.

5. Agree to remain unmarried until commissioned.

6. Be physically qualified, in accordance with the requirements for the U.S. Naval Academy, except that the vision requirements for Contract students are 20/40 each eye, corrected by lenses to 20/20.

7. If a contract student, he signs an agreement to accept a commission, if tendered, as an ensign, U.S. Naval Reserve, or second lieutenant, U.S. Marine Corps Reserve, and serves two years on active duty upon completion of College training, if called by the Secretary of the Navy.

8. If a regular student, he signs an agreement to accept a commission, if tendered, to retain this commission for a period of six years and to serve not less than four years on active duty as an officer, if called by the Secretary of the Navy.

SPECIAL PROCEDURES

Contract students are enrolled by the Professor of Naval Science upon their own application and are subject to selection and physical examination at the College within a limited quota as assigned by the Navy Department. These students are taken primarily from the entering freshman class at the beginning of the fall semester.

Inasmuch as the selection of contract students is completed during the first week of the fall semester and in view of the fact that the contract quota is limited, all students who desire to be considered for the NROTC program should apply prior to the first day of classes in the fall. An application is not binding, and, even after enrollment in the program, a contract student may withdraw from the program, without prejudice, upon his own request at any time within the first two years.

However, enrollment is normally for four years and there is no change from "basic" to "advanced" status when entering the junior year of college.

Regular students enter the NROTC through a nation-wide test and selection system conducted by the Naval Examining Selection, Science Research Associates, 104 Pearl Street, McHenry, Illinois. The competitive examination is conducted in the late fall of the year, approximately nine months before enrollment of the applicant.

Transfer from contract to regular status; Contract NROTC students may compete for regular status and if selected will be enrolled as regular students without loss of standing.

THE NAVAL SCIENCE STUDENT

Disqualified NROTC applicants may take the Naval Science course for the purpose of acquiring advanced standing to be used when applying for NROTC enrollment at a later date in the event of removal of the disqualification. Also, the Naval Science course may be taken by those students who have no interest in NROTC enrollment, but who wish the instruction. Students in either of the above categories are known as Naval Science Students.

Naval Science students receive credit for satisfactory completion of the Naval Science course, but have no official status in the NROTC Program, and receive none of the advantages of the Regular and Contract NROTC students other than the training and background gained. This training would prove to be beneficial should the graduated Naval Science student apply for a commission through sources normally available to college graduates other than the NROTC Program.

DRAFT DEFERMENT

A student enrolled in the Naval ROTC will be deferred from the draft (Selective Service of 1948 and Universal Military Training Act of 1951) if he satisfactorily pursues the Naval ROTC course for four full years, including the summer training period applicable to his status as contract or regular student.

A contract student who is disenrolled loses his draft deferment.

A regular student who is disenrolled will be transferred to enlisted status in the U.S. Naval Reserve or U.S. Marine Corps Reserve.

The Naval Science student is not deferred from induction for service under the Selective Service Regulations.

CURRICULA

General: In order to obtain a commission either in the U.S. Navy, U.S. Naval Reserve, U.S. Marine Corps, or U.S. Marine Corps Reserve, students are required to obtain a baccalaureate degree and complete twenty-four semester hours in the Department of Naval Science.

The following courses may not be taken by a regular student:

Pre-Medicine, PreDental, and Pre-Theological.

A contract student may take such courses but it is to be remembered that all NROTC graduates usually go on immediate active duty upon graduation, and so additional training for one of those professions will be delayed until completion of the period of obligated naval service.

During each semester every student is required to attend two laboratory periods of one hour's duration each week. He is also required to complete mathematics through trigonometry, or a semester of college mathematics, by the end of his sophomore year. In addition, each regular student must complete one year of college physics. Two separate curricula in naval science subjects are offered in the junior and senior year, leading to commissions in the Line of the Navy, and the Marine Corps.

NS 11.
Sea Power and Orientation.

A study of the Department of Defense, the basic customs and traditions of the Navy, the present-day Navy and the student's part in it. *Three credit hours.*

NS 12. Sea Power and Orientation.

A study of the influence of Sea Power upon global history. The stimulation of a living interest in the Navy and an appreciation of the contributions of Sea Power to the past, present, and future progress of the United States. *Three credit hours.*

NS 21.
Naval Weapons.

A study of ballistics and ordnance, fire control equipment, and the integration of these units into systems for their tactical employment in combat. The development of a realistic and practical approach to the duties of a gunnery department officer. *Three credit hours.*

NS 22
General Psychology

A study of the psychological nature of the individual and of groups, and the influences effecting human action and interpersonal relations. (This course will be taught by a member of the Department of Education). *Three credit hours.*

NS 41.
Naval Engineering.

A study of basic naval engineering, including main propulsion steam plants, diesel engines, and ship stability. *Three credit hours.*

NS 42.
Navigation.

A study of the theory and technique of surface navigation. Familiarization of the student to the extent that he will be able to assist intelligently the Navigator of a ship to conduct it safely by modern methods of navigation. A study of the fundamentals of naval tactics. *Three credit hours.*

NS 51.
Naval Operations.

A study of the responsibilities of naval officers in shipboard operations; such as relative movement, tactical communications and instructions, and rules of the nautical road. To afford a basic understanding of fleet communications and an introduction to electronic countermeasures. A study of the operational importance of the weather. *Three credit hours.*

NS 52.
Naval Administration.

A study of the general responsibilities of administration, discipline, and leadership, which the student must assume upon acceptance of a commission. *Three credit hours.*

Candidates for commissions in the Marine Corps will be required to complete NS 11, 12, 21, and 22. In place of NS 41, 42, 51, and 52, they will take courses in Marine Corps subjects as follows:

NS 45.
Evolution of the Art of War.

An historical study of the evolution of warfare, including: Principles of War, Offensive Combat, Defensive Combat, and studies of warfare in specific eras. *Three credit hours.*

NS 46.
Evolution of the Art of War and
Modern Basic Strategy and Tactics.

A continuation of the historical study of the evolution of warfare developing into a treatment of modern basic strategy and tactics.
Three credit hours.

NS 55.
Amphibious Warfare, Part I.

A study of the development of amphibious warfare operations and their employment in World War II.
Three credit hours.

NS 56.
Amphibious Warfare, Part II.
Leadership, and the Uniform Code
of Military Justice.

A continuation of the study of amphibious warfare concentrating on tactics, equipment, and modern methods of employment. A study of the general responsibilities the student must assume when commissioned, in the fields of leadership, discipline, and naval justice.
Three credit hours.

Courses of Instruction

DEPARTMENT OF

Philosophy

Professors: Dowling, Gillis, Haran, Hutchinson, Keating, Moran, Sarjeant, J. J. Shea

Associate Professors: Drohan, Harrington Keleher, MacDonald

Assistant Professors: F. F. Callahan, J. D. Crowley, Donnelly (Chairman)

Philosophy 21, (41). Logic

Introduction to philosophy; great names and great systems; definition and division of philosophy.

Study of the idea; definition, extension, and comprehension; division—the universal idea, predicable and predicaments. Terms: mental and oral—division—analogy and supposition.

The study of the judgement: definition—propositions, their nature and division—extension and comprehension of the predicate—quantity and quality of propositions—opposition, conversion and equivalence of propositions.

The study or reasoning: the syllogism, various kinds and their laws—figures and modes; other forms of argumentation; demonstration and its division; deduction and induction, complete and incomplete. *Three credit hours.*

Philosophy 22, (42). Epistemology.

Study of truth, and of the mind in relation to truth; ignorance, doubt, opinion, certitude; means of arriving at certitude; senses, intelligence, reason, intellectual analysis; motives and criteria of truth; objective evidence. *Three credit hours.*

Philosophy 43. General Metaphysics.

Realistic approach to being. Starting point: the sensory-intellectual "given". The problem of change: potency and act, substance and

accident, matter and form. Essence and existence. The analogy of being. The attributes of being. Contingent and necessary being. The first cause and supreme being. *Three credit hours.*

Philosophy 44. Cosmology.

Subject matter, bodily things. Physical essences; atoms, elements, substantial changes and essential differences. Mechanical atomism, dynamism, the hylomorphism as accounts of the ultimate constitution of matter. Quantity, and the meaning of 'continua'. Efficient and final causality in the activities of bodily things. Laws of nature; miracles. Cosmogony, and the monistic explanations, both pantheistic and naturalistic. Cosmogony by creative act. *Three credit hours.*

Philosophy 51. Natural Theology.

The Existence of God; various philosophic attitudes; our knowledge of this truth; cosmological and teleological arguments; Ontologism, Traditionalism, and Pragmatism in regard to this truth.

The Essence of God: the idea of the Infinite; unity of God; physical and metaphysical essence; Modern Pantheists; Anthropomorphism.

The Divine Attributes; immortality, eternity and immensity of God; simplicity and infinity of God; The Divine Intellect and Knowledge; Fore-knowledge of God; Fore-knowledge of free actions; the Divine Will; Omnipotence of God.

Activity of God with Creatures: preservation of creatures; concurrence; Providence; its relation to evil.

Supplementary Questions: Schopenhauer's 'World Will'; Hartmann's 'Unconscious'; Alexander, on Space-Time. *Two credit hours.*

Philosophy 52.
Fundamental Psychology.

Life in General: properties of living and non-living bodies; immanency of actions; Scholastic concept of life.

Plant Life: sensitive life; unity and divisibility of the animal soul; instinct and intelligence; theories on the origin of the instinct.

Origin of Life: the scholastic theory on the origin of the first living bodies; spontaneous generation; origin of plant and animal species.
Two credit hours.

Philosophy 53.
Advanced Empirical and Rational Psychology.

A study of sensitive life, including the nature of sensation and its properties; doctrine of the species, the external and internal senses, hallucinations and dreams; the perception of the material world and the refutation of the skeptical theories of Descartes, Locke, Berkeley, Hume, Mill, Bain; the sensuous appetite. A study of intellectual life, including the origin of ideas, judgement and reasoning, attention and reflection, memory, the rational appetite—the will, its nature and freedom.

A study of the human soul, its substantiality, individuality, simplicity and spirituality; refutation of false theories on the nature of the human soul; origin and destiny of the human soul; anthropological evolution.

Four credit hours.

Philosophy 55.
General Ethics.

Definitions, nature, object necessity of Ethics; the ultimate end of man; beatitude;

the human act; merit and accountability; the passions; virtue and vice; morality of human acts; the norm of morality; Utilitarianism and Hedonism: Bentham, Mill and Spencer; the eternal law and the natural law; properties and sanction of the natural law; nature and origin of moral obligations; Kant's categorical imperative; Conscience. *Four credit hours.*

Philosophy 56.
Special Ethics.

Man's duty to his Creator; Rationalism; Indifferentism.

Man's duty to himself; man's duty to preserve himself; suicide.

Man's duty to his neighbor; direct and indirect killing; killing done in self-defense; lying, mental reservation.

Right of ownership: Communism and Socialism; theories of Henry George; Herbert Spencer on the right of property; modes of acquiring property; rights of disposing property by will; contracts; relations of capital and labor; trade unions; strikes.

Social Ethics: Society in general: nature and end of domestic society; unity and indissolubility of matrimony; divorce; parental authority; education of the child.

Civil Society: nature, end and origin; false theories on the origin of civil society; Hobbes and Rousseau; the Scholastic doctrine; forms of civil government; citizenship; universal suffrage; the functions of civil government—legislative, judiciary, executive; taxation; death penalty; freedom of worship; freedom of the press; state education.

International Law: various meanings of *Jus Gentium*; foundation international law; mutual relations of nations; right of commerce; rights of neutrals; nature and justice of war; arbitration.
Four credit hours.

Courses of Instruction

DEPARTMENT OF Physics

Professors: Smith (Chairman), Connolly, McDonald
Associate Professors: MacDonnell, Radle
Instructor: Pepin

PHYSICS

Physics 11, (25, 45). Mechanics, Heat and Sound.

An introduction to Mechanics, Heat and Sound. Three lectures and one (three-hour) laboratory period. *Four credit hours.*

Physics 12, (26, 46). Electricity and Light.

An introduction to Electricity and Light. Continuation of Physics 11. Three lectures and one (three-hour) laboratory period. *Four credit hours.*

Physics 21. Geometrical and Physical Optics.

Fundamental concepts in geometrical optics. Laws of image formation. Optical systems. Aberrations in optical systems. Photometry. Optical instruments. Interference, diffraction and polarization of light. The eye and color vision. Radiation. Interferometry. Three lectures and one (three-hour) laboratory period. Prerequisite Ph. 11, 12. *Four credit hours.*

Physics 22. Heat and Thermodynamics.

Temperature and thermometry. Laws of thermodynamics. Equations of state for gases. Specific heats. The transfer of heat by conduction and convection. Thermodynamic relations and their use. Power cycles. The principle of the increase of entropy. Three lectures and one (three-hour) laboratory period. Prerequisite: Ph. 12. *Four credit hours.*

Physics 41, 42. General Physics.

A survey of the fundamental laws of Mechanics, Sound, Light, Heat and Electricity. The principles are illustrated by their application to the automobile, aeroplane, meteorology, seismology, astronomy, radio and television. This course is concluded by an introduction to Modern Physics. Elective for non-science majors. Two lecture hours and one (two-hour) laboratory period. *Six credit hours.*

Physics 43. Introduction to Astronomy.

By means of lectures and illustration, coupled with some observation and laboratory work, the student is given a view of the universe in which we live. The course is developed by tracing the investigations which lead to the presently known picture of the world. Elective for non-science majors. Two lectures and one laboratory period. *Three credit hours.*

Physics 44. Introduction to Geology.

Origin and age of the earth. Weather and climate. Terrestrial magnetism. Processes of erosion. Glaciers and glaciation. Isostasy. Volcanism. Minerals. Rock structure. Earthquakes. Geologic history. Elective for non-science majors. Two lectures and one laboratory period. *Three credit hours.*

**Physics 51.
Electricity.**

Electrostatics, magnetostatics, theory of dielectrics, the electric circuit, the magnetic circuit, inductance, capacity, alternating current, electric oscillations, instruments and measurements. Three lectures and one (three-hour) laboratory period. Prerequisite: Math. 22 and Ph. 12. *Four credit hours.*

**Physics 52.
Introduction to Atomic Physics I.**

Atoms as components of matter. Magnetic, Optical and Electrical properties of atoms. Photons and X-Ray spectra. Three lectures and one (three-hour) laboratory period. Prerequisite: Math. 22 and Ph. 51. *Four credit hours.*

**Physics 55.
Theoretical Mechanics.**

Linear oscillators. Motion in two and three dimensions. Lagrange's and Hamilton's equations. Motion of rigid bodies. Elastic vibrations. Flow of fluids. Three lectures. Prerequisite: Math. 22. *Three credit hours.*

**Physics 56.
Electromagnetic Theory.**

Electrostatic and magnetostatic fields Solutions of Laplace's Equation Maxwell's Field Equations. Reflection and refraction of electromagnetic waves. Radiation. Microwave theory. Antennas and wave guides. Three lectures Prerequisite: Ph. 51. *Three credit hours.*

**Physics 61.
Introduction to Nuclear Physics.**

Constitution of the nucleus. Natural radioactivity. Artificial nuclear disintegration. Alpha, Beta and Gamma decay. Nuclear reactions. Nuclear structure. Nuclear fission. Nuclear energy. Sources of nuclear energy. Isotope separation. Three lectures and one (three-hour) laboratory period. Prerequisite: Math. 22 and Ph. 51. *Four credit hours.*

**Physics 62.
Electronics.**

A study of the characteristics and applications of vacuum and gas-filled thermionic and

photoelectric tubes, cold cathode tubes, cathode-ray tubes, barrier layer photocells, and other electronic devices. Three lectures and one (three-hour) laboratory period. Prerequisite: Ph. 65. *Four credit hours.*

**Physics 65.
Alternating Current Circuits.**

Sinusoidal single-phase and polyphase circuit analysis. Non-sinusoidal waves. Determination of circuit parameters. Transmission line calculations. Filters. Transient conditions. Three lectures. Prerequisite: Ph. 51. *Three credit hours.*

**Physics 66.
Introduction to Atomic Physics II.**

Special theory of relativity. Wave mechanics. Schrodinger equation. Electron Spin and multiplet spectra. Exclusion principle. Quantum Statistical mechanics. Three lectures. Prerequisite: Physics 52. *Three credit hours.*

**Physics 73.
Engineering Drawing.**

Isometric and oblique projections. Simple perspective projections. The construction of conics and rolled curves. Dimensioned free-hand sketches from machine parts and detail drawings from sketches. Two (two-hour) laboratory periods. *Two credit hours.*

**Physics 74.
Descriptive Geometry.**

A study of the fundamental operations of orthographic projection. Lines, planes, solids, sections, developments tangent lines and planes, and intersections of surfaces of revolution. Two (two-hour) laboratory periods. *Two credit hours.*

**Physics 75.
Seminar.**

The Physics Seminar, a circle of the faculty and the more advanced students majoring in physics, meets semi-monthly.

Courses of Instruction

DEPARTMENT OF Sociology

Professor: Facey (Chairman)
Associate Professor: Burke
Instructors: Fallon, Glass

Sociology 11, 12, (21, 22). Introductory Sociology.

The introduction to sociological analysis of social formations, processes, functions and control; culture and social change.

Six credit hours.

Sociology 55, 56. Social Psychology.

I. A study of the interrelations of the individual, group and culture; the rise and functions of the social self and personality against a background of the historical development of the field in terms of motivational and learning theory.

II. The description and analysis of abnormal patterns of behavior in its individual and collective aspects in addition to public opinion, mass communication, mass media, propaganda, and current research procedures.

Six credit hours.

Sociology 62. Contemporary Sociological Theories.

A descriptive and critical study of the development of sociological theory from Comte to the present.

Three credit hours.

Sociology 64. Industrial Sociology.

The relationship between large-scale industrial organizations and the individuals who work within them; the inception of labor unions, their emergence from and relations to industry; the interrelations of industry, union,

and community as social systems.

Three credit hours.

Sociology 65. American Minorities.

A description and analysis of minority-majority relations as part of the social structure of a society; theories of prejudice, inter-group relations, and current trends.

Three credit hours.

Sociology 66. Marriage and the Family.

The essential functions of the family in relation to historical development; process analysis of stages of family growth in relation to factors contributing to marital success.

Three credit hours.

Sociology 71. The U.S.S.R.

Structural-functional analysis of political, economic and related social systems of the Soviet Union; ideological and international significance of major developments.

Three credit hours.

Sociology 73. Social Stratification.

An integrated and comprehensible analysis of class structure in non-industrialized and industrialized societies from a structural-functional framework of reference; current evidence, research techniques, and future development of the field. (Not offered 1958-59).

Three credit hours.

**Sociology 76.
Cultural Anthropology.**

The study of man against a background of human biological potentiality, natural habitat and culture; the diversity of culture; research techniques employed and theoretical framework. (Not offered 1958-59).

Three credit hours.

**Sociology 77, (51, 52).
Social Research.**

The design and the major techniques of research applied in group projects.

Six credit hours.

Courses of Instruction

DEPARTMENT OF Theology

Professors: Casey, Doody, Harkins, O'Connor, R. M. Sullivan
Associate Professors: Delaney (Chairman), Hugal, McGrady, J. R. Sullivan, Walsh
Assistant Professors: Donnelly, J. A. King
Instructor: Barry

Theology 11. The Life of Christ.

The divine progressive revelation in the Old Testament concentrates on the prophecies concerning a Redemption to be accomplished and a Kingdom to be established by the Messias, Prophet, King and Priest.

The origin, literary type and historical value of the Gospels. The political, social and religious background, and the Messianic expectations in Palestine at the time of Christ's birth and ministry. The early ministry.
Two credit hours.

Theology 12. The Person, Mission and Church of Christ.

Christ's self-revelation as divine legate, authentic religious teacher for the whole world, Messias and Son of God. The nature and probative value of His miracles. The origin and juridical structure of His Kingdom, the Church, in the Gospels; its functioning in the Acts of the Apostles. The position and prerogatives of Peter in the Church of Christ. The perpetuity and indefectibility of the Church of Christ.
Two credit hours.

Theology 21. Christ in His Members. (Part I).

The Mystical Body of Christ in the New Testament and in Christian history. The sacramental system. Baptism, Confirmation, the Eucharist, Sacrament and Sacrifice.
Two credit hours.

Theology 22. Christ in His Members. (Part II).

Sin and Repentance. The sacraments of penance, extreme unction, holy orders and matrimony.
Two credit hours.

Theology 41. Christology and Soteriology.

Jesus Christ, God and Man; Priest and Redeemer. The Redemption. Mary, the Mother of the Word Incarnate. Her prerogatives.
Two credit hours.

Theology 42. Fall of Man and Justification.

The background, setting, meaning and consequences of original sin. The nature, necessity, gratuity and effects of grace, both actual and habitual.
Two credit hours.

Theology 51. The Act of Faith, Trinity, Eschatology.

Analysis of faith; process, character, effects, necessity of the act of faith; the dogma of the trinity; eschatological concepts; death, judgement, heaven, hell, purgatory.

Theology 52. Christian Churches in America.

The division of Churches. The Ecumenical movement. A comparative study of the Catholic and Protestant doctrinal positions. The origin of the Orthodox Church. The men and causes of the Protestant Revolt. History and condition of Protestantism. Protestant sects on the American scene.

Courses of Instruction

GRADUATE DEPARTMENT OF **Chemistry**

Professors: *Fiekers (Chairman), Baril, Van Hook*
Associate Professor: *Tansey*

The College conducts courses in Chemistry for Graduate Students leading to the Master of Science degree. Registration for these courses is open only to students who hold Bachelor's degrees from approved colleges and technical schools. Candidates for admission should file applications with the Chairman of the Chemistry Department before the fifteenth of March each year. In support of application each candidate should forward a transcript of his undergraduate record and two letters of recommendation should be supplied by former chemistry professors of the applicant. A supplemental completed transcript, with record of degree received, should be sent after graduation in the case of successful applicants. Information as to fellowships available in the graduate department should be requested of the Chairman for Chemistry.

REQUIREMENTS FOR DEGREE

To become candidates for the Master of Science Degree students must fulfill the following conditions:

1. Attend and complete, with work of high quality, graduate courses amounting to not less than thirty semester credits of which at least ten must be obtained in laboratory courses.
2. Present an experimental thesis in their major field which shall include the results of original research and evidence of high scholarship.
3. Pass a one-hour oral, public examination conducted by the Chairman and Staff of the Department with at least one other member of the College Faculty to be appointed by the Dean.

Recommendation for the degree does not, however, follow automatically upon the completion of courses and examinations, but only on the affirmative judgement of the Department in each individual case.

ADMISSION TO GRADUATE WORK

Applicants for graduate work should present a minimum of eight undergraduate credits in each of the following subjects: the differential and integral calculus (eight credits total), physics, inorganic chemistry, organic chemistry, analytic chemistry, and physical chemistry. Laboratory work should be included in all of these courses except the calculus. Other laboratory courses in chemistry are desirable. Accordingly applicants who do not present the following undergraduate courses may be required to take them in whole or in part, along with, or antecedent to, their regular graduate work. Cases will be judged individually from the record of undergraduate work.

Chemistry 58 Physical Chemistry III (See page 97)

Chemistry 61 Advanced Organic Chemistry I (See page 97)

When these courses of their equivalents are offered, only one year of residence will be the normal requirement for the acquisition of the Master of Science degree.

GRADUATE COURSES

Chemistry 201.

Advanced Inorganic Chemistry.

The lectures in this course comprise a study of the structure of inorganic compounds and the interrelations of elements and compounds according to the periodic chart. Valence studies are stressed and the ideas of Werner, Pauling, Price and current workers in the field are emphasized. The laboratory part of the course starts off with inorganic preparations and progresses into instrumental, analytic and advanced methods, such as liquid ammonia syntheses and the like. Industrial analysis is touched upon. Required of all graduate students. Two lectures and two triple-hours of laboratory per week for one semester.

Five credit hours.

Chemistry 203.

Advanced Organic Chemistry.

The syllabus for this course will vary from year to year according to current trends in organic research and the special background that may be required to comprehend modern advances. Topics used in the past have included: advanced topics in stereochemistry, cyclization of organic compounds and organic heterocyclic chemistry, the chemistry of organic nitrogen compounds, the Diels-Alder Diene synthesis and the chemistry of carbohydrates, fats, oils and other natural products. Similarly the laboratory course, apart from the acquisition of organic chemical preparative techniques that are not generally realized in the undergraduate courses, is gen-

erally geared to current organic research in the department. Thus at times micro analysis for elements occurs. Required of all graduate students. Two lectures and two triple-hours of laboratory per week for one semester.

Five credit hours.

Chemistry 207.

Chemical Thermodynamics.

This course develops the principles of chemical thermodynamics and includes applications. The fundamentals of statistical mechanics are also taught. Laboratory work comprises experiments in advanced physical chemistry with emphasis on thermochemistry. Required of all graduate students. Three lectures and two double hours of laboratory per week for one semester.

Five credit hours.

Chemistry 208.

Reaction Rates.

A study of the kinetics of reactions in both homogeneous and heterogeneous systems, paralleled with experimental applications. Required of all graduate students. Three lectures and two double-hours of laboratory per week for one semester.

Five credit hours.

Chemistry 209.

History of Chemistry I.

The historical development of fundamental chemical concepts up to and including the nineteenth century. Assigned readings. Required of all graduate students. One lecture per week for one semester.

One credit hour.

Chemistry 210.
History of Chemistry II.

A study of contemporary developments and contemporary chemists. Assigned readings. Required of all graduate students. One lecture per week for one semester.

One credit hour.

Chemistry 212.
Department Seminar.

One hour per week. *One credit for each semester.* Total credit not to exceed two credit hours.

RESEARCH FOR MASTER'S DEGREE

Chemistry 213.
Research for Master's Degree.

Research of a fundamental nature is offered in organic and physical chemistry. Opportunity for the direction of undergraduate research in problems related to current graduate research is also afforded. Six hours per week for two semesters.

Six credit hours.

Chemistry 214.
The Literature of Chemistry.

This is an informal course, with no record

or credit, which is adapted to the needs of the individual student or group. The course is introduced with a brief lecture, a conducted tour of the Library in the Department of Chemistry, assigned reviews of handbooks like Reid, Soule, Mellon and the patent policy handbooks of various companies. Literature searches are then assigned preferably in fields outside of the student's concentration. Eventually the student's library work in connection with his own research is carefully supervised.

FELLOWSHIPS

In 1926, the College of the Holy Cross established six graduate fellowships in Chemistry. At present each fellowship carries free board, room and tuition or its pecuniary equivalent. Fellows are required to spend from four to twelve hours per week in undergraduate labor-

atory instruction. These fellowships are offered to graduates of colleges or technical schools, who are properly qualified to undertake graduate work in chemistry. Applications must be filed with the Chairman for Chemistry by the fifteenth of March each year.

Degrees Conferred

June 11, 1958

HONORARY DEGREES

DOCTOR OF LAWS

Edward Joseph Maginn
John Alphonsus Matthews, Sr.

DOCTOR OF SCIENCE

Alfred Maximilian Gruenther
Charles Joseph Edward Kickham
Francis Owen Rice

DOCTOR OF COMMERCIAL SCIENCE

Victor Daniel Ziminsky

DEGREES IN COURSE

BACHELOR OF ARTS HONORS MAGNA CUM LAUDE

Constantine Louis Clemente
John Stephen Guarnaschelli
John Tolan Harrington
Francis James Higgins
William Paul Kennedy

Philip Montgomery Law, Jr.
Arthur Edward McGuinness, Jr.
Michael Jerome Kevin O'Loughlin
Martin Thomas Paul
Thomas Charles Theobald

William John Williams, Jr.

BACHELOR OF ARTS HONORS CUM LAUDE

Raymond Arthur Burchell
William Stephen Busch
David Granfield Connor
Robert Emmett Curran
Paul Joseph Duggan
Peter Michael Dunn
Andrew John Franzone
James Patrick Kiernan
Traugott Francis Lawler
Joseph Howard Maguire, Jr.
Stuart Thomas Maher
James Ayres McGough

James Matthew Milliken
Victor Joseph Morano
Robert Joseph Mulvaney
Kenneth Jones Nixon
Joseph John O'Brien
Timothy James O'Connor, Jr.
Francis Michael O'Regan
Stanley Valentine Orzech
Robert Paul Roche
John Wyville Sheehy, Jr.
Louis Paul Tasciotti
John Holmes Wilson

BACHELOR OF ARTS HONORS

Robert Edmund Barrett, Jr.
Paul Louis Bollo
James Aloysius Connor
John Marshall Conroy
James Ambrose Dawson
Hammond James Dugan, III
William Augustine Fennelly
Walter James Fields
Peter James Filicetti
Myles Hannan
Herbert George Keene, Jr.
Paul Thomas Keyes

John Richard Joseph Long
Robert Kenneth Marzik
George Maurice Mulligan
David Buckley O'Hearne
Charles Anthony Olivia
William Arthur O'Neil
Austin William O'Toole
Edmund Paul Power, Jr.
James Michael Reidy
Douglas David Roche
James Rogers Suelzer
Paul Stephen Teranes

BACHELOR OF ARTS SUMMA CUM LAUDE

Thomas William Hungerford

BACHELOR OF ARTS MAGNA CUM LAUDE

George Joseph Gauthier

Thomas Aquinas McGrath, Jr.

BACHELOR OF ARTS CUM LAUDE

John Reardon Barry, Jr.
Alfred Joseph Boutot, Jr.
Paul Andrew Cantalupo
David Joseph Collins
John Patrick Davis
Richard John DeVecchio
Remi Gerard Dubuque
Richard Joseph Matteis

Joseph Patrick McGrath
William Alfred Merritt
Patrick Joseph O'Toole
Edward John Rudzinski
Richard Wyman Shea
Richard Alfred Stebbins
Donald Raymond Sweeney
Dwight Thomas Wall

John Michael Wyser-Pratte

BACHELOR OF ARTS

Robert Edmund Bagot, Jr.
Richard John Baker
Edward Francis Barrett
John Charles Blake
Robert John Bond, Jr.
Vincent Lawrence Brunhard, Jr.
Patrick Joseph Byrnes
Robert Paul Byron
Francis Paul Calamita, Jr.
John Joseph Carmody, Jr.
Anthony Stephen Carroll

John Brogan Carven, Jr.
James Hubert Clark
John Dean Clausen
John Kevin Clune
Richard Alan Cody
Thomas Gerard Conway
Albert Joseph Coursey
Hugh Francis Crean, Jr.
Richard James Cunningham
John Gregory Dalton, Jr.
Bruce Anthony Damm

Leon Paul Danilowicz
 John Joseph Dolan
 Thomas Joseph Dolan
 William Henry Donnelly, Jr.
 Ronald Christopher Drees
 William Lawrence Drew
 Patrick Duffy
 Thomas Reginald Dyson, Jr.
 Robert Joseph Farrell
 Francis Michael Fetsko
 Paul Vaughn Gearan
 Charles Gilmore George
 Francis James Gloeckner, Jr.
 Robert Eugene Golden
 David Joseph Gorman
 Francis Gabriel Grather
 Robert Anthony Grattaroti
 Thomas James Groark
 James William Haller
 John Bernard Hanley
 Kenneth Frederick Happe
 Robert James Haran
 Edward Joseph Harrison, III
 John Joseph Hayden
 Hugh Francis Healy
 Allan Francis Henderson
 James Lawrence Jackson, Jr.
 Anthony John Karpawich
 John Edward Keenan, Jr.
 Leo Arthur Kellogg
 Michael Joseph Kickham
 Kenneth Francis Xavier Kunzman
 James Henry Lynch
 Jeremiah Francis Mahoney
 Walter Anthony Malkiewicz
 Robert James Martin
 Richard Faithful Mascola
 James David Mathews
 Robert Geary McGee
 William Dorsey McGeehan
 Kevin McGowan
 Gerald Francis McLaughlin
 Braden Anthony Mechley
 Joseph Charles Megan, Jr.

Edwin Farley Moran
 Philip David Moran
 Paul Gorman Morrissey
 Thomas Edward Mott
 John Joseph Moynihan
 Michael Francis Moynihan, Jr.
 Robert Christopher Mullin
 James Joseph Murdocco
 Charles Theodore Murphy, Jr.
 James Francis Murphy
 Thomas E. C. Murphy
 Kenneth Joseph Nizolek
 Patrick Brian O'Brien
 Ronald James O'Brien
 John Joseph O'Connell
 John Edward O'Connor, Jr.
 Gerald Michael Ormon
 Henri Arthur Paré
 Vincent Joseph Pellegrino
 James Francis Proud
 David Alfred Quinn
 Ronald Alphonse Recko
 Daniel Charles Robeson
 Thomas Joseph Romano
 Gerald Skinner Rourke
 Raymond Robert Ruppert, Jr.
 Thomas Noel Joseph Ryan
 William Francis Ryan
 Joseph Daniel Scanlan
 Michael John Singelyn
 Gregory Carlton Sinnott
 Joseph William Sokolowski, Jr.
 Vincent William Sottosanti
 John LaForrest Stebbins, Jr.
 Joseph Paul Stefan
 David Lawrence Sullivan
 Michael Emmett Taylor
 Thomas Joseph Tierney
 Paul Francis Toland
 Martin Francis Tully
 Charles Francis Twomey
 James Martin Walsh
 Thomas Edward Walsh, Jr.
 Richard Francis Warner

Edward Frederick Weiss
George Lawrence White
Edward Nicholas Wilson

Kelvin Karl Wolferse
William Foster Wollen
John Edward Wright

BACHELOR OF SCIENCE MAGNA CUM LAUDE

Charles Francis Hughes
Anthony Carl Lettiere
Henry Robert Radoski

Paul Alexander Schweitzer
Robert Gordon Scribner, Jr.
Joseph Patrick Zaia

BACHELOR OF SCIENCE CUM LAUDE

Thomas Francis Bennett
Shaun Edward Condon
Louis John D'Amore
William Cannon Donahue
Walter Peter Engel
James Francis Fay
Mark Farrell Fox
Paul Douglas Gleason

Ralph Patrick Morone
Robert Michael Nedzbala
Leon Joseph Radziemski, Jr.
Josè Dimas Riera
Alvin John Robertson, Jr.
John Henry Schwarz, Jr.
William Joseph Stoloski
Joseph Richard Tatarczuk

BACHELOR OF SCIENCE

Charles Calvert Alexander
Peter Alan Alicandri
LeRoy Victor Amy, Jr.
Arthur John Andreoli
William Gordon Bagley
Daniel Vincent Bartolomei, Jr.
Peter Byrne Baxter
John Michael Belden
William Francis Bird
John Michael Bowen
Paul Thomas Branon
James David Brock
Kevin Elliott Brothers
Edward Raymond Bryson
Robert Charles Bucci
Anthony Ralph Buonomo
Raymond Thomas Burke
Henry Francis Burns, Jr.
John Jeremiah Butler
Edgardo Capot
John Manley Cappeller
Richard Albert Cardinal
Frederick Joseph Cartier, Jr.

Gerald Louis Ciota
William James Coffey, Jr.
James Fitzgerald Cooney
John Francis Coyne, Jr.
Edward James Crane
Thomas George Cunningham
Robert Gahan Cuskley, Jr.
William Robert Daley
James Hannon Daughan
Arthur John DeNomme, Jr.
William Howard Dietrich
William Barrett Disney, Jr.
Daniel Frederic Doherty, Jr.
John Joseph Donahue
Thomas Martin Dougherty
Charles Edward Downs, Jr.
Robert Havens Dully
Clement William Duran
Richard Alfred Durot
Richard Joseph Eaton
Webb Francis Elkins
Charles Francis Enright
James Paul Ewen

William Harold Farley	Paul Michael Kelley
Edward William Farrell	Thomas Patrick Kelly, Jr.
John Francis Finnegan	Thomas Leo Kennedy
Daniel Robert Fitzgerald	William Howard Kent
Gerald Joseph FitzGerald	John Carey Kern
John Patrick Fitzgerald	Joseph Peter Kinney
Thomas Owen Fitzpatrick	Frederick Clark Kong
Roy Patrick Flaherty	William Patrick Kozlak
Edward Flannery	Carl Francis Lanza, Jr.
Francis Thomas Fleischer	Joseph Anthony Layden
Robert Joseph Flynn	John Paul Leahy
James Manna Fornataro	Joseph Alexander LeClair, Jr.
Vincent Pascal Fusco	Paul Eugene LeClaire
Mark Edward Gallagher, III	William Thomas Lee
John Joseph Gallo, Jr.	James Henry Lenden, Jr.
Frederick John Geiger	James Webber Lent, Jr.
Peter Edward Gelderman	Peter Carl Linnemann
Robert Warfield Getz	Edward Valentine Locke
Thomas John Giaimo	Richard Francis Lominsky
Francis Sylvester Giglio, Jr.	Robert Joseph Lutz
Gerard Francis Gilbert	Robert Joseph Lynch
Dana Gerard Gillis	Robert Stephen MacDonald
Patrick William Gorman	John Patrick Madden, Jr.
Frederick John Gosebrink	William Joseph Madden, Jr.
Francis Latimer Gould	David Cornelius Mannis
Anthony George Graziano	Roger Arthur Martin
Bernard James Hampsey, Jr.	Nicholas Michael Mascoli, Jr.
Barry Thomas Hannon	William Hartley McCullough
Francis Jones Hartnett	John Joseph McDonald
Kamel Robert Hassan	John Patrick McDonough, Jr.
Neil Thomas Heffernan, Jr.	Charles Thomas McEnery
Paul Joseph Hickey	Joseph Francis McEnroe, Jr.
William Joseph Higgins	David Terrence McGinnis
Michael Anthony Horgan	John Courtney McGroarty
Neville Patrick Hugelmeyer	Charles Augustus McGuire, Jr.
Joseph Henry Hughes, Jr.	Raymond Edward McLaughlin
William Patrick Hunt, Jr.	William Burns McManus
Robert John Imbus, Jr.	Frederick Phair McMenemy
Henry Leo Jakubauskas	John Michael McQueeny
John James Jeffrey, Jr.	David Cordier Melroy
Paul Anthony Keane	Peter John Mercier
Robert Joseph Keane, Jr.	John Anthony Miele, Jr.
Paul Kevin Keating	Francis Peter Millette
Stanley John Keating, Jr.	Alden Francis Mitchell, Jr.

Albert Godfrey Mongeau
 Hugh Joseph Moriarty
 Thomas Cook Morrier
 Carrol Anthony Muccia, Jr.
 John Joseph Mulkerin
 Robert Leo Muniz
 Brian Colin Murphy
 Leonard Thomas Murphy
 William Kirby Murphy
 Joseph Thomas Murray
 Michael Howard Vance Nolan
 Joseph William Norton, Jr.
 Roderick David O'Byrne
 Arthur Herbert O'Connell, Jr.
 David Henry O'Connell
 James John O'Connor
 Burton Joseph O'Keefe
 James Somers Oliver
 James Thomas O'Malley, Jr.
 Francis James O'Neill
 Edward Francis O'Rourke
 John Joseph O'Shea, Jr.
 Paul Peter Padovano
 Matthew William Panagiotu
 Joseph Robert Pellegrino
 Alfred Earl Pfoertner
 William Henry Potter, Jr.
 John Paul Pucilauskas
 James Joseph Quinn, Jr.
 John Francis Quinn
 Joseph John Reardon
 James Paul Redgate
 John Joseph Regan
 Herbert William Reilly, Jr.
 Robert Michael Restaino
 Joseph Clayton Rhea, Jr.
 Raymond Gill Richards
 John Luin Ringel
 Francis Harold Robarge, Jr.
 Thomas Joseph Ryan

Anthony Arnold Santaniello
 Stephen John Francis Schildwachter
 William Thomas Schnurr
 James Charles Schopfer
 Richard John Shea
 John Francis Sigmund
 Joseph Robert Shillinsky
 Arthur Kevin Smith
 Eric Edmund Smith
 Henry Ignatius Smith
 Samuel Charles Sofia
 James Thomas Staunton
 Ralph Anthony Stephani
 Peter Edward Strain
 William Bryan Strong
 Richard Leslie Studholme
 Edward Desmond Sullivan
 Richard Henry Surrette
 Arthur Cornelius Sweeney
 Robert Gregory Switala
 John Raymond ten Hoopen
 John Joseph Thornton, Jr.
 Robert Norman Tortorella
 James Edward Tracy
 Armand Louis Turrin
 Frederick Joseph Turrin
 Neil Joseph Twomey
 James Edward Tyrrell
 Donald Gerard Urian
 Michael Christian Vaupel
 John Francis Walsh, Jr.
 Robert Francis Walters
 David Bohan Ward
 Thomas Edward Welch
 Daniel Francis Wheeler
 Paul Augustine Whelan
 Clayton Edward Whiting, Jr.
 Robert James Williamson
 James Haus Woods, Jr.
 Earle Francis Wozmak

Walter George Wrobleski, Jr.

COMMISSIONED AS ENSIGNS IN THE
UNITED STATES NAVY

LeRoy Victor Amy, Jr.	Paul Eugene LeClaire
Richard John Baker	James Henry Lenden, Jr.
John Reardon Barry, Jr.	Richard Francis Lominsky
Robert John Bond, Jr.	Robert Joseph Lynch
Raymond Arthur Burchell	Stuart Thomas Maher
John Marshall Conroy	Charles Thomas McEnery
Thomas George Cunningham	William Burns McManus
John Gregory Dalton, Jr.	Frederick Phair McMenemy
Richard John Del Vecchio	William Alfred Merritt, Jr.
William Howard Dietrich	Edwin Farley Moran, Jr.
Walter Peter Engel	David Henry O'Connell
James Francis Fay	John Edward O'Connor, Jr.
Daniel Robert Fitzgerald	David Buckley O'Hearne
John Joseph Gallo, Jr.	William Arthur O'Neil
Frank James Gloeckner, III	Francis Michael O'Regan
Fred John Gosebrink	James Paul Redgate
Myles Hannan	Douglas David Roche
John Joseph Hayden	Gerald Skinner Rourke
Neil Thomas Heffernan, Jr.	John Henry Schwarz, Jr.
William Joseph Higgins	Joseph Paul Stefan
Charles Francis Hughes	David Lawrence Sullivan
William Patrick Hunt, Jr.	Thomas Joseph Tierney
James Lawrence Jackson, Jr.	Paul Francis Toland
William Paul Kennedy	Clayton Edward Whiting, Jr.
	Edward Nicholas Wilson

COMMISSIONED AS SECOND LIEUTENANTS IN THE
UNITED STATES MARINE CORPS

Arthur John Andreoli	William Kirby Murphy
William Francis Bird, Jr.	James Michael Reidy
Robert Joseph Flynn	Anthony Arnold Santaniello
Gerard Francis Gilbert	Gregory Carleton Sinnott
Francis Latimer Gould	William Joseph Stoloski
Robert John Imbus, Jr.	Robert Norman Tortorella
Traugott Francis Lawler	Michael Christian Vaupel
David Cornelius Mannis	John Michael Wyser-Pratte

COMMISSIONED AS SECOND LIEUTENANTS IN THE
UNITED STATES AIR FORCE RESERVE

Edward Francis Barrett	*John Charles Blake
*Thomas Francis Bennett	Paul Louis Bollo

Paul Thomas Branon
 William Stephen Busch
 Richard Albert Cardinal
 James Hannon Daughan
 Arthur John DeNomme
 Charles Edward Downs, Jr.
 *Patrick Duffy
 Richard Joseph Eaton
 Webb Francis Elkins
 Francis Michael Fetsko
 Edward Flannery
 Charles Gilmore George
 Francis Gabriel Grather
 Anthony George Graziano
 John Bernard Hanley
 Barry Thomas Hannon
 Thomas Patrick Kelly, Jr.
 Kenneth Francis X. Kunzman
 John Patrick Madden, Jr.
 William Joseph Madden, Jr.
 Walter Anthony Malkiewicz
 Charles Augustus McGuire, Jr.

Raymond Edward McLaughlin
 David Cordier Melroy
 Albert Godfrey Mongeau
 Brian Colin Murphy
 Joseph Thomas Murray
 *James John O'Connor
 *Patrick Joseph O'Toole
 Gerald Michael Ormon
 Alfred Earl Pfoertner
 *William Henry Potter, Jr.
 *Leon Joseph Radziemski, Jr.
 Raymond Gill Richards
 *Edward John Rudzinski
 Joseph Daniel Scanlan
 Eric Edmund Smith
 Henry Ignatius Smith
 Vincent William Sottosanti
 Arthur Cornelius Sweeney
 Armand Louis Turrin
 Frederick Joseph Turrin
 Richard Francis Warner
 Daniel Francis Wheeler
 Kelvin Karl Wolferse

**Distinguished AFROTC Graduate*

STUDENT SPEAKER

Valedictory Address John W. Sheehy, Jr.

DEGREE CONFERRED SEPTEMBER 20, 1958

BACHELOR OF ARTS

James Magner Kearns

DEGREES CONFERRED SEPTEMBER 22, 1958

BACHELOR OF ARTS

John Francis Kennedy
 Martin John McLaughlin

BACHELOR OF SCIENCE

James Bernard Reidy

Awards

June 1958

The Bellarmine History Medal

The Bellarmine Gold Medal, the gift of Mr. and Mrs. Edward J. McGratty, Sr., in memory of Patrick H. and Elizabeth L. McGratty, for the best historical essay on Colonial America.

Not awarded.

The Bourgeois Award

The Bourgeois French Prize, the income on \$1,000, established in 1947 by Albert L. Bourgeois, Esq., '22, a memory of his late father, Pierre Bourgeois, and of his mother, Fabiola Bourgeois, to be awarded annually for the best essay on a subject relating to the French or their descendants in the United States.

Awarded to: George J. Gauthier, of the Class of 1958, for his essay entitled: "Moliere and Préciosité."

The Nellie M. Bransfield Prizes

The Nellie M. Bransfield Award, founded in 1946, by the will of the late Nellie M. Bransfield, income on \$2,000, to be awarded annually as prizes for excellence in elocution among the undergraduates.

Awarded to: John A. Shields, of the Class of 1959 (First Prize). Donald Galamaga, '59, and John Guarnaschelli, '58 (Second Place Tie).

The Frank D. Comerford Prize

The Frank D. Comerford Silver Medal, founded in 1942 by the management and employees of the Boston Edison Company, to be awarded annually at Commencement Exercises to a student of the graduating class for excellence in public speaking.

Awarded to: William P. Kennedy, of the Class of 1958.

The Crompton Scientific Medal

The Crompton Gold Medal, founded in August, 1875, by George Crompton, Esq., for the best Scientific Essay submitted during the school year.

Awarded to: Clayton E. Whiting, Jr., of the Class of 1958, for his essay entitled: "Ramblin' with Rockets."

The John J. Crowley Prize

The John J. Crowley Purse (income on \$1,000.00) awarded annually to provide purse or prize for best essay on any religious, literary, historical, economic or scientific subject.

Not awarded.

The Patrick F. Crowley Memorial Prize

The Patrick F. Crowley Purse, the income on \$1,000.00, founded in July, 1947 by Bridget T. Crowley, in memory of her brother, Patrick F. Crowley, to be awarded annually for proficiency in debating and oratory.

Awarded to: Thomas G. Conway, of the Class of 1958.

The DeValera History Purse

The DeValera Purse (income on \$1,000.00), the gift of Daniel H. Coakley, for the best essay on a subject taken from Irish history.

Not awarded.

The Fallon Debating Prize

The Fallon Debating Prize, founded in 1901 by Rev. John J. Fallon of the Class of 1880, (income on \$1,000.00).

Awarded to: Joseph F. Kett, '59 and William J. Madden, '61.

The Flaherty Prize in History

The Flaherty Gold Medal, founded in May, 1903, by Patrick W. Flaherty, Esq., to be awarded annually for the best essay on a subject selected by the Faculty.

Not awarded.

The Flatley Philosophy Prize

The Flatley Gold Medal, founded in 1890 by the late Reverend Michael F. Flatley of the Class of 1865, to be awarded annually to the student attaining the highest average in the philosophy courses of senior year.

Awarded to: Thomas W. Hungerford, of the Class of 1958.

The Reverend William F. Hartigan Medal

The Reverend William F. Hartigan Medal, founded in May, 1932, by Josephine C. Hartigan in memory of her brother, the Reverend William F. Hartigan, to be awarded annually to a student of the graduating class submitting the best essay on a subject in Religion.

Awarded to: Joseph H. Maguire, Jr., of the Class of 1958, for his essay entitled: "A Catholic Critique of the Ecumenical Movement and the World Council of Churches."

The Kavanagh Award

The Kavanagh Medal, established in 1952 by the late Right Reverend Michael P. Kavanagh of the Class of 1893, to be awarded annually to the student writing the best original essay on some phase of Catholic Art or Christian Archaeology.

Awarded to: Robert E. Barrett, Jr., of the Class of 1958, for his essay entitled: "Modern Church Architecture."

The Killeen Prize in Chemistry

The Edward V. Killeen, Jr. Chemistry Purse, for general excellence throughout the Bachelor of Arts premedical course in chemistry.

Awarded to: Andrew J. Franzone, of the Class of 1958.

The Kranich Prize

The Kranich Gold Charm, the gift of the Kranich Brothers, Inc., of Worcester, Massachusetts, to be awarded annually to the student contributing the best essay to "The Purple".

Awarded to: Kenneth F. Happe, of the Class of 1958, for his essay entitled: "Mary's Spice Shop and Thornton's Teeth", published in the January issue.

The John C. Lawlor Memorial Prize

The John C. Lawlor Gold Medal, the gift of the Class of 1911, to perpetuate the memory of Dr. John C. Lawlor of the Class of 1911, to be awarded annually to a letterman of the graduating class adjudged the outstanding student and athlete during the college course.

Awarded to: William A. Merritt, of the Class of 1958.

The William E. Leahy Award

The William E. Leahy Award in memory of William E. Leahy of the Class of 1907, to the outstanding debater in the B.J.F. Debating Society. This memorial prize consists of a medal and a cash award of \$100.00.

Awarded to: John P. Laschenski, of the Class of 1959.

The Leonard Purse

The Leonard Award, founded in 1951 by the will of the late Reverend John F.

Leonard, to be awarded annually for proficiency in oratory, debating or like competition.

Awarded to: Joseph E. Roesch, of the Class of 1960.

The Markham Memorial Prize

The Markham Memorial Prize consisting of a Gold Medal and a Purse of \$100.00, established in 1947 by the Most Reverend Thomas F. Markham, D.D., of the Class of 1913, in memory of his parents, James and Honora Hickey Markham, to be awarded annually to a student of the graduating class, designated by the Dean as having the highest rank of academic proficiency in the philosophy course of Natural Theology.

Awarded to: Paul A. Schweitzer, of the Class of 1958.

The McMahon History Purse

The McMahon Purses, three in all, founded in 1927 by the late Right Reverend Monsignor John W. McMahon of the Class of 1867, to be awarded annually for the best essays on the History of the Catholic Church in New England.

Awarded to: Paul A. Cantalupo, of the Class of 1958, for his essay entitled: "Rev. Francis Anthony Matignon—His Influence in Opening a New Era in the History of Boston and New England Catholicity."
Second and Third Prizes not awarded.

The Nugent Physics Medal

The Nugent Gold Medal, founded in June, 1894, by the Reverend Edward Evans Seagrave to perpetuate the memory of his ward, John T. Nugent, who died at the College in 1893, awarded annually for general excellence throughout the course in Physics.

Awarded to: Henry R. Radoski, of the Class of 1958.

The O'Connor Debating Prize

The Joseph J. O'Connor Purse, income on \$1,000 the gift of the late Joseph J. O'Connor of the Class of 1909.

Awarded to: Raymond A. Burchell and Thomas G. Conway, of the Class of 1958.

The Mrs. Kate C. Power Medal

The Mrs. Kate C. Power Medal, founded in 1942 by the will of the late Mrs. Kate C. Power, to be awarded to the highest ranking student in the College of the Holy Cross in the Bachelor of Arts (with Honors) Course in the Sophomore year.

Awarded to: John M. Greaney, of the Class of 1960.

The Purple Prize

The Purple Purse, the gift of the College, to be awarded annually to the student contributing the best poem to "The Purple".

Awarded to: John P. Hackett, of the Class of 1961, for his poem entitled: "So Full and Fast the Days", published in the March issue.

The Reverend John F. Redican Prize

The Reverend John F. Redican Medal, donated by a friend in memory of The Reverend John F. Redican, '78, awarded annually to the Junior (Honors Course) with highest rank in Philosophy.

Awarded to: John T. Onuska, Jr., of the Class of 1959.

The Reilly Memorial Prize

The James H. Reilly Memorial Purse, the income on \$600, founded by Joseph J. Reilly of the Class of 1904 and immediate relatives, to be awarded annually to the student contributing the best short story to "The Purple".

Awarded to: Traugott F. Lawler, of the Class of 1958, for his trilogy of "Edward Stories" published in the November, December and March issues.

The Freeman M. Saltus Prize

In memory of Freeman M. Saltus, awarded for excellence in essays on labor or economics.

Not awarded.

The Strain Philosophy Prize

The Strain Gold Medal founded in June, 1877, to be awarded annually for the best essay on a subject selected from the field of philosophy.

Awarded to: Joseph H. Maguire, Jr., of the Class of 1958, for his essay entitled: "The Genius of M. Maritain."

The Lieutenant William Peter Sullivan, Jr. Medal

The Lieutenant William Peter Sullivan, Jr. Medal, the gift of Mrs. William P. Sullivan, Jr., in memory of her late husband, Lieutenant William Peter Sullivan, Jr., U.S. Naval Reserve, of the Class of 1939, to be awarded annually to the member of the varsity track team who, by vote of his fellow team members, is adjudged to have merited this award.

Awarded to: William A. Merritt, of the Class of 1958.

The Varsity Club Norton Purse or Medal

(Income on \$500.00) for an athlete in A.B. with Honors Course.

Awarded to: Robert Emmett Curran, of the Class of 1958.

The Worcester County Alumni Sodality of Our Lady Medal

Awarded to the member of the Students' Sodality chosen as the outstanding sodalist of the year.

Awarded to: James J. O'Connor, of the Class of 1958.

College Organizations

THE LEAGUE OF THE SACRED HEART

The League of the Sacred Heart was established at the College on the first of November, 1888. It has ever since been a most efficacious means of propagating among the students the practice of a most tender devotion to the Sacred Heart of Our Lord.

THE SODALITY OF OUR LADY

The Sodality of Our Lady was organized on the eighth day of December, 1844, and aggregated to the Roman Prima Primaria on the tenth day of April, 1846, with the title of the Immaculate Conception, and under the patronage of St. Aloysius. The Sodality exists for boarding and day students alike, and has for its object the realization of the fullness of the Christ-life through Mary, by means of the solemn consecration of its members, and their active dedication to the Sodality's regulated "way of life" in their respective vocations after the completion of their college days.

ST. JOHN BERCHEMAN'S SANCTUARY SOCIETY

The St. John Berchman's Sanctuary Society has for its object the fostering of a special devotion in the assisting at the altar in all religious ceremonies.

THE B. J. F. DEBATING SOCIETY

Organized in 1846 in honor of the Founder of Holy Cross College, the Most Reverend Benedict Joseph Fenwick, this society, in the century of its existence, has a tradition of excellence in the art of public speaking. It carries on its meetings in the well-appointed Leonard Debating Hall. It supports an extensive schedule of House, Lecture, Radio and Inter-Collegiate Debates.

Membership in the B. J. F. Debating Society is usually drawn from the Junior and Senior Classes.

FRESHMAN AND SOPHOMORE INTRAMURAL DEBATING

Regular inter-class sectional meetings of these two organizations give the Freshmen and Sophomores an opportunity for basic training in the preparation of debate material, clear thinking and accurate, polished expression. Student interest has been enlivened by the healthy rivalry current among the respective class sections.

THE MATHEMATICS CLUB

The Mathematics Club was established in 1946. It holds meetings twice

monthly to discuss topics in advanced undergraduate mathematics. The purpose of the club is to promote the study of pure and applied mathematics.

THE DRAMATIC SOCIETY

The Holy Cross Dramatic Society has been functioning since the establishment of the College. It sponsors a varied program in the production of Shakespeare, modern drama and original one-act plays.

THE AQUINAS CIRCLE

The Aquinas Circle is an organization of Seniors and Juniors interested in further study and discussion of philosophical problems and their correlation with modern thought in science and literature. The Circle meets twice a month.

THE CROSS AND SCROLL CLUB

The Cross and Scroll Club, originally formed as the Hellenic Academy for the promotion of interest in classical studies, has through the years expanded its aims to include topics of Literature, Art and General Culture. Besides its group meetings the Club sponsors public lectures pertinent to Christian Culture and Education.

THE MUSICAL CLUBS

Two separate organizations foster and develop musical talent among the students—the College Glee Club and the College Orchestra and Band. The purpose of the Glee Club is to instill and promote among its members a love and appreciation of the truly beautiful in music through the medium of choral singing. A program of concerts throughout the year is an incentive for enthusiastic interest. Students participating in the activities of the College Orchestra and Band receive valuable experience in orchestral work. For public concerts this organization collaborates with the Glee Club.

THE COLLEGE CHOIR

The College Choir was organized to assist at Chapel Services and to promote devotion by acquainting students with the treasury of Church music.

THE BIOLOGY SOCIETY

The Biology Society, composed of students majoring in biology, provides its members with the opportunity to study more intensively and critically some of the problems of that science.

THE CROSS AND CRUCIBLE CHEMISTS' CLUB

This club is devoted to the advancement of chemistry and the development of social and professional relations among its members. The club

was founded in 1927 and reorganized in 1947. It is open to all undergraduate students of chemistry. The club is a Chapter of Student Affiliates of the American Chemistry Society and publishes the *Hormone*, a monthly chemical magazine for undergraduates.

THE INTERNATIONAL RELATIONS CLUB

This Club has for its purpose a thorough understanding of the principles that motivate states in their conduct with one another. It seeks a deep knowledge of the causes that produce international tensions. Its practical objective is to be able to offer a sound policy or policies that can bring about international peace.

THE PHYSICS SOCIETY

The Physics Society, composed of students majoring in physics, has as its purpose the development of deeper and wider interest in the subject. Meetings are held weekly. Speakers from the faculty, student body and industry discuss aspects of pure physics or its applications. The publication of the Society is *The Cross-Product*.

THE LABOR PROBLEMS ACADEMY

The Labor Problems Academy, open to students majoring in Economics, was organized in 1935 to encourage the study of Catholic principles applicable to the labor problems in the United States. This academy was organized with a threefold purpose: to stimulate personal research and individual interest in the historical development of, and contemporary relationships among capital, management, labor, and the community in these problems; to obtain and classify scientific and unbiased pamphlets, periodicals, and similar reference materials for use by the Faculty, members of the Debating Societies and Lecture Teams, members of the Academy, and other undergraduates interested in these problems; to engender an appreciation of the pronouncements upon the moral relationships between capital and labor contained in Papal Encyclicals.

THE HISTORY ACADEMY

The History Academy, composed of instructors and students in history, has for its object the increase of interest in the study of history. It holds weekly meetings at which are read and discussed essays on various topics taken from the field of history.

THE MISSION UNIT

The Holy Cross Unit of the Mission Crusade was established in 1921. Relief of the Missions is encouraged by donations of the students. Students contribute to foreign and home missions large sums of money, large quantities of Catholic papers, altar supplies, books and clothing.

THE PURPLE KEY

It is the purpose of this organization to foster devotion, loyalty, and enthusiasm for Alma Mater. The Purple Key sponsors student activities, plans and conducts student manifestations of the spirit of Mount St. James and always endeavors to promote the interests of the students in the affairs of their college life.

THE INTERRACIAL JUSTICE CLUB

The Interracial Justice Club was organized in 1951 to promote better understanding of the Catholic attitude toward contemporary "racial" problems. It holds weekly discussions on campus and participates in inter-collegiate workshops.

THE CONFRATERNITY OF CHRISTIAN DOCTRINE

The Confraternity of Christian Doctrine is a student teacher's unit. The purpose of the Confraternity is "to bring Christ to youth and to bring youth to Christ". Over 100 Holy Cross students are enrolled in the confraternity and conduct religious doctrine classes for grammar school boys and girls and for high school students. Adult discussion classes are also conducted every week as well as classes for student nurses and other professional groups.

RADIO WORKSHOP—STATION WCHC

The Campus Radio Station WCHC, which began a formal broadcasting schedule on December 6, 1948, is operated entirely on an extra-curricular basis by student members of the Radio Workshop. WCHC provides a talent outlet and radio experience for hundreds of students in its various departments: station management, programming, production, announcing, radio dramatics, sports, news, writing, music, commercial departments and other functions common to commercial radio stations.

STUDENT CONGRESS

Students are encouraged to organize and conduct their own activities with as much independence as is consistent with good order and sound educational policy.

The Student Congress is composed of elected representatives and officers of the student body whose purpose is to act as the official representative of the student body; to receive and express student opinion; and to advance the best interests of the student body with the Administration and Faculty, and with other educational institutions and associations.

INTRAMURAL ATHLETICS

Perhaps the most flourishing and popular extra-curricular activity on the Hill is the Intramural sports program. The great majority of students who

are not engaged in varsity competition take some part in intramural sports. Teams are organized from among the Day Students and groups from each corridor of the Residence Halls. Competitive tournaments are played in football, basketball, baseball, etc. The intramural sports provide healthful exercises and plenty of fun; cement friendships and develop many positive traits of good character and personality.

HOLY CROSS ATHLETIC ASSOCIATION

The object of the Athletic Association is to promote the athletic interests of the College, and to discuss and determine matters of the management pertaining to the welfare of collegiate and intercollegiate sports.

Rev. Joseph A. Glavin, S.J.	Faculty Adviser
Eugene F. Flynn, B.A.	Director
Joseph W. McDonough, B.S.	Assistant Director
William C. Crowley, M.A.	Public Relations
Edward N. Anderson, B.S., M.D.	Coach of Football
James M. Harris, B.S.	Assistant Coach of Football
Melvin G. Massucco, B.S.	Assistant Coach of Football
Roy H. Leenig	Coach of Basketball
John J. Barry	Coach of Baseball
Bartholomew F. Sullivan	Coach of Track; Trainer
Charles F. Donnelly	Coach of Golf
Albert D. Riopel, B.A.	Freshman Coach
William C. Samko, B.S., M.S.	Assistant Trainer
Walter M. Mulvihill, B.A., M.D.	Physician
Francis H. Carr, B.A., M.D.	Physician

Honor Societies

ALPHA SIGMA NU

(Holy Cross Chapter)

Alpha Sigma Nu is a National Honor Society with chapters in various Jesuit Colleges and Universities throughout the United States. It is a society organized to honor students who have distinguished themselves in scholarship, service and loyalty to their College; to promote the interests of their College; to foster all praiseworthy student activity; to unite those alumni who most fully understand and appreciate those ideals in themselves and others.

The following new members were elected to the Holy Cross Chapter on 23 December 1958.

Peter H. Baker
Jan D. Blais
Neil P. Caughlan
Peter F. Devaney, Jr.
W. Barry Gault

John M. Greaney
John J. Issa
Joseph X. Loftus
Jay R. Massey
Frank E. Reilly

DELTA EPSILON SIGMA

(Alpha Iota Chapter)

Delta Epsilon Sigma is a National Honor Society for students and graduates of Catholic Colleges and Universities constituted to give recognition and encouragement to high scholarship. The Holy Cross Chapter (Alpha Iota) was inaugurated and the first members initiated on June 9, 1941. Students members are drawn from ten percent of the Senior Class with scholastic honor rating.

The following new members were elected to the Holy Cross Chapter on 23 December 1958.

Kerry H. Alley
Jan D. Blais
Brian P. Donaher
Terence F. Gilheany
Joseph F. Kett
John P. Laschenski

Charles M. Madden
John L. Mahoney
William J. McCormick
John T. Onuska, Jr.
George P. Royall
Paul R. Swarney

John A. Wise

College Publications

THE HOLY CROSS PURPLE

The Holy Cross Purple is a monthly magazine published by the students of the College. Its aim is to cultivate a high literary taste among the students by exercising them in both critical and creative compositions.

THE CRUSADER

The Crusader, the weekly newspaper of the College, first appeared during the academic year 1924-1925. Its purpose is to secure a firmer bond among the undergraduates, telling the important happenings of the life on the Hill.

THE PURPLE PATCHER

The Purple Patcher, published annually by the Senior Class, is a chronicle of the activities of the Class during its four years' stay on the Hill.

THE HORMONE

The Hormone is normally published eight times a year by the Department of Chemistry. It provides a medium of scientific expression for chemistry students; it records work of a progressive nature done in the department; it supplements the textbooks with timely articles of general interest to the student of chemistry; and it records the abstracts of departmental seminars and theses.

THE ALUMNUS

The Alumnus, published five times yearly by the Holy Cross College Alumni Association and edited by the Executive Alumni Secretary, is twofold in its purpose: first to secure a firmer bond among the graduates; secondly, to serve as a nexus between the Alumni and the College.

JESUIT EDUCATIONAL ASSOCIATION

Colleges and Universities

Alabama	Spring Hill College, Spring Hill
California	Loyola University of Los Angeles Santa Clara University, Santa Clara University of San Francisco
Colorado	Regis College, Denver
Connecticut	Fairfield University, Fairfield
District of Columbia	Georgetown University, Washington
Illinois	Loyola University, Chicago
Louisiana	Loyola University, New Orleans
Maryland	Loyola College, Baltimore
Massachusetts	Boston College, Chestnut Hill College of the Holy Cross, Worcester
Michigan	University of Detroit, Detroit
Missouri	Rockhurst College, Kansas City St. Louis University, St. Louis
Nebraska	The Creighton University, Omaha
New Jersey	St. Peter's College, Jersey City
New York	Canisius College, Buffalo Fordham University, New York City Le Moyne College, Syracuse
Ohio	John Carroll University, Cleveland Xavier University, Cincinnati
Pennsylvania	St. Joseph's College, Philadelphia University of Scranton, Scranton
Washington	Gonzaga University, Spokane Seattle University, Seattle
West Virginia	Wheeling College, Wheeling
Wisconsin	Marquette University, Milwaukee

Appendix

DONORS TO THE LIBRARY

January 1, 1958—December 31, 1958 inclusive

American Antiquarian Society
 American Assembly, The
 American Geographical Society
 American-Israel Society
 American Newspaper Guild
 American Zionist Emergency Council
 Amherst College Library
 Anti-Defamation League of B'nai B'rith
 Assumption College
 Dr. Louis Aubé
 Austrian Information Service
 Miss Elizabeth Barry
 Rev. William J. Beane, '29
 B'nai B'rith, Worcester Lodge
 Miss M. Boland
 Boston College
 Boston College High School
 Prof. Alfred Boursy
 Dr. Clement E. Brault
 Edward Brawley, '48
 Ilse Breuer-Reichhold
 British Information Services
 John L. Brown
 Business History Review
 University of California
 Carnegie Institute of Technology
 John Carney
 The Edward F. Casey Collection
 Dr. Alexander F. Carson, ex '19
 Rev. Thomas F. Casey, '44
 Mr. and Mrs. Francis E. Cassidy
 Prof. George J. Charest, '22
 Mrs. Bertram Chesterman
 Chinese Embassy
 Dr. Robert Chisholm, '48
 J. Robert Clair, '20
 Columbia University

Commission on Civil Rights
 Committee for International Economic
 Growth
 Hon. Thomas H. Connelly Memorial
 Committee
 John C. Corbett, '23
 Julia F. Condon (The Rev. C.A. Condon,
 '11 Fund)
 Lamont Corliss
 John C. Costello
 Alfred Cowles
 James M. Curley
 William H. Daly
 John K. Day
 Mr. and Mrs. Michael Dignan
 Richard Dignan
 William B. Disney
 Col. James K. Donaghy
 Rev. George J. Donahue
 John C. Donohoe, '23
 Rev. Cornelius F. Donohue
 Hon. Harold D. Donohue
 Mr. and Mrs. Joseph Donovan
 Raymond E. Donovan
 James J. Dowd, '10
 John C. Drohan, '23
 Prof. Francis Drumm, '22
 Jeremiah K. Durick, '20
 Prof. Paul Edmonds, '50
 Miss Frances Egan
 In memory of J. Frank Facey Fund
 Maurice & Laura Falk Foundation
 Federal Republic of Germany (Consu-
 late of the)
 Federal Reserve Bank, Boston
 Charles E. Feinberg
 Dr. Paul J. FitzPatrick, Prep. '13

Dr. W. H. Foley, '22
 Friendly Sons of St. Patrick,
 Society for the
 Miss Marie Esmond Fuller
 John W. Gardner
 Michael A. Gentile
 Goodspeed's Book Shop, Boston, Mass.
 Mr. and Mrs. Francis Gosciminski
 Prof. William Grattan, '38
 Mr. and Mrs. William Greany
 Grace Guiney
 Mrs. Daniel A. Haire
 Rev. Howard V. Harper
 Prof. W. E. Hartnett
 Harvard Business Review
 Harvard Book Store, Cambridge, Mass.
 Ray Heffernan
 Jerome Hickey, '59
 Henry M. Hogan, '18 Fund
 Holy Cross College—Alumni Society
 of Our Lady
 Holy Cross College—Class of 1949
 Fund
 Holy Cross College—Class of 1953 (In
 memory of Rev. Clarence Sloane, S.J.)
 Holy Cross College—Class of 1954 (In
 memory of Rev. Clarence Sloane, S.J.)
 Holy Cross College—Class of 1954
 Music Fund
 James M. Hoy, '05 Fund
 Miss Mary Hurley
 The Indianapolis Star
 Institute of Life Insurance
 Institute of Social Order
 International Rescue Committee
 Italian Consulate General, Boston, Mass.
 Lawrence J. Jackson
 I. Jamieson
 The John Carter Brown Library,
 Providence, R.I.
 John Rylands Library
 Kansas University Library
 Virgil Kauffman
 Mr. and Mrs. Aloysius J. Kearns
 Rev. John J. Kelliher, '53
 T. Leonard Kelly, '21
 Commonwealth of Kentucky
 Kentucky University Libraries
 Francis Kiernan, '13
 William J. Kiernan, '53
 Rev. R. E. Lamb, C.S.B.
 In memory of Albert D. Lasker
 Rev. J. M. Lelen
 Carlow A. Lewis
 Library of Congress
 Leo U. Lombardi
 John T. Madden Fund
 Miss Lillian Madden
 Miss Rose A. Maloy
 Mrs. M. Martineau
 Massachusetts Bar Association
 Commonwealth of Massachusetts
 Massachusetts Legislative Research
 Bureau
 Mrs. George Maynard
 Miss Mary A. Melican
 Eugene Meyer
 Children's Fund of Michigan
 Charles Moran
 Sterling Morton
 Frank L. Mott
 Peter P. Mullen
 Dr. & Mrs. Vincent McBrien
 Daniel McCarthy, '47
 James McCarthy
 William McClusky, '15
 Francis McCullagh (Estate of)
 John T. McGillicuddy, '26
 Rev. John T. McGinn, C.S.P.
 Dr. Martin McGuire, '21
 Judge Matthew McGuire, '21
 Rev. Frederick R. McManus
 Aloysius J. McNally
 Miss Mary McNally
 National Book Foundation
 National Education Association of U. S.
 National Planning Association
 National Review

National Sharecroppers Fund
 Nato Information Division
 New York Life Insurance Co.
 University of North Dakota Library
 Dr. Joseph O'Connor, '03
 Patrick F. O'Connor, '32
 Organization of American States
 Daniel T. O'Shea, '25
 John J. M. O'Shea, '25
 Pallottinum—Society of The Catholic
 Apostolate
 Peter Kosta
 Pfizer & Co. Inc.
 Elizabeth Pinney-Hunt
 University of Pittsburgh
 Princeton University
 Mrs. Andrew Rafferty
 L. Ralya
 John K. Reeves
 Philip Reidy, '41
 Robert Reidy, '37
 Rt. Rev. Msgr. John F. Reilly, '11
 Mrs. Mary J. Reynolds
 Ricci Publications
 Mrs. A. Hamilton Rice
 Fred W. Richter, '32
 Miss Rachael M. Romano
 William E. Russell, Sr., ex '18
 Rev. L. A. Ryan, O.P.
 George Sabine
 Paul F. Sadler, '54
 Mrs. Stephen Sadler
 St. Ignatius Print Mart
 St. John Unversity, Brooklyn, N.Y.
 St. Joseph's Abbey, Spencer, Mass.
 College of St. Teresa, Winona, Minn.
 Anne Santimore
 Embassy of Saudi Arabia
 Sawyers Inc.

Timothy A. Shea
 Mr. and Mrs. Frederick Sherry
 Sister Maria Ancilla
 Sister Mary Ursula, R.S.M.
 Sisters of Mercy
 The Society for the Preservation of the
 American Musical Heritage, Inc.
 Southern Illinois University Press
 Spanish Embassy
 Spanish Mission in the U.S.
 Mrs. Foster Stearns
 Charles H. Stevens
 Rev. John Leo Sullivan, '05
 Teachers' College, Columbia University
 James A. Treanor, Jr., '24
 Twentieth Century Fund
 U. S. Atomic Energy Commission
 U. S. Department of Labor
 U. S. State Department of Archives
 & History
 U. S. Naval Academy
 U. S. Office of Education
 U. S. Steel Corporation
 United Steelworkers of America
 Utah University
 Virginia University
 Michael J. Walsh
 Vincent Walsh
 Dorothy Wayman
 Arthur Weisenberger & Co.
 West Virginia University
 Julius Wolfson
 Stanislaus G. Wondolowski, '32
 College of Wooster
 Worcester Art Museum
 Worcester County Trust Co.
 Worcester Free Public Library
 Mrs. C. G. Yavis
 Joseph Younglove

Bequests

Gifts to the college may take the form of funds for the establishment of scholarships or professorships; or the foundation of medals and other prizes; of additions to the material equipment; of contributions to the general fund, or may be undesignated. Those desiring to make a bequest to the College of the Holy Cross in their wills may be helped by the following suggested form

Legal Form of Bequest

I give (devise) and bequeath to the Trustees of the College of the Holy Cross, a corporation under the laws of the Commonwealth of Massachusetts, and located in the City of Worcester, Massachusetts, and their successors forever, the sum of

..... Dollars

(or otherwise describe the gift) for its general corporate purpose (or name a particular corporate purpose).

INQUIRY BLANK

Correspondence should be addressed as follows:

Regarding admission to the Freshman Class,

To the Director of Admissions

Regarding admission to all other classes or as a special student,

To the Dean of the College

Regarding admission to the graduate department of Chemistry,

To the Chairman of the Chemistry Department

Candidates for admission to the Freshman Class should submit their applications promptly upon completion of the first semester of their senior year.